

Apple® In Depth



A reference guide to apple products

Fall/Winter 1980



 **apple computer inc.**

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The Seeds Of Success

The advent of a personal, affordable computer is one of those milestones of technology which mark the beginning of a new and better way to accomplish work and express creativity. Apple, acknowledged as a leader in personal computers, was the first company to make available to millions what was once available only to large organizations—computer power.

Founded in 1976, the company was the brainchild of two young engineers with big dreams and small resources. They made the prototype Apple computer in a garage, that now proverbial birthplace of many great ideas in California's Silicon Valley. This humble beginning—a nice but true touch to their success story—didn't detract from the technological sophistication of the computer they christened "Apple," a whimsical name as unusual as the product itself.

Acclaim By Innovation

Computer hobbyists were the first market of the fledgling company. Most were electronics engineers, targeted because they could easily recognize the high performance and overall quality of the new computer. And recognize it they did: demand for the unit soared, soon outstripping the production capabilities of the garage. Apple had arrived.

In 1977, the company revolutionized the personal computer market with the introduction of the Apple II, the first fully assembled computer of its kind. Unlike the "kits" offered by the competition, its performance did not depend upon the varying talents of its users to solder, wire, assemble components, and "debug" the finished product.

Additionally, the Apple II was the first fully programmable computer of its size. It brought many of the capabilities of large data processing systems into the everyday lives of individuals, at a cost and convenience not previously possible. Acceptance of the Apple II rapidly spread from hobbyists to business managers and other professionals.

Apple III, the newest in the company's line of personal computers, was designed to provide these professionals—managers, engineers, financial analysts, accountants—with the most powerful, affordable, and versatile desktop computer on the market today. Equipped with twice the memory available on other personal computers, Apple III can perform sophisticated tasks to solve complex problems faster and more economically than ever before.

Today, Apple Computer Systems are used in small businesses and large corporations; in elementary and secondary schools; in college classrooms; in science and engineering laboratories; and in homes throughout the world. By any standard—price/performance, dependability, enhanceability, service, software support, ease of understanding and operation—Apples are the preferred personal computers.

Service And Support

The company's commitment to quality is reflected not only in its products, but in its outstanding service and user support as well. There are more than 800 authorized Apple Service Centers worldwide: the largest personal computer maintenance network in existence. There's a hotline to Apple Headquarters in Cupertino, California, where applications experts stand by to provide assistance by telephone when needed. And—because excellence is designed into every product—Apple is able to back its computer systems with the lowest-priced Extended Warranty package in the industry. This total support, unique in the personal computer field, is another reason why Apple computers are the best personal computers available.

Documentation

A philosophy of excellence is also demonstrated in the company's comprehensive documentation. As the design of its computers indicates, Apple understands the challenge and utility of simplicity. Its equipment and program manuals contain easy to follow exercises and clear, detailed explanations of procedures. Apple's objective is to educate and build user confidence and familiarity so that its products can be put to work quickly.

Apple's Future

According to Business Week Magazine*, "Of all the companies that owe their existence to the hobby computer phenomena, only Apple has emerged so far with the strength to become a significant factor in the small-computer markets of the 1980s."

The company's dedication to quality is the basis of this strength and the most effective way it can continue its remarkable growth. Through its advanced research and development activities and commitment to product excellence, Apple is determined to expand its position as the preferred personal computer manufacturer. It is well on its way.

The Federal Communications Commission has established new emission standards for computer devices that take effect January 1, 1981. Apple is taking steps to make its products compliant with those regulations. As a result of this—or of other factors—the specifications of certain products in this catalog may change without notice.

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E — Education
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The Apple II and II Plus Personal Computer Systems

The Most Popular Personal Computers In Their Class

Apple II and II Plus computers have been specifically designed to make your working time more productive, your learning time more exciting, and your leisure time more entertaining and creative. Whether you use your Apple II or II Plus in your office, your classroom, your laboratory or your home, you'll be impressed with its powerful capabilities and ease of operation.

Special Solutions For Special Needs
With either system, you'll discover that a variety of applications are just a few keystrokes away. For example, you can...

- write, revise, edit and print reports, letters, term papers and other documents quickly and easily...
- establish, maintain and update a general ledger, accounts receivable and payable records for a small business, eliminating hours of paperwork...
- control and monitor a shop's inventory automatically, reducing losses and increasing profits...
- teach computer science, including languages such as Pascal, BASIC and more, while eliminating the problems associated with timesharing systems...
- introduce young children to computers with exciting and instructive quizzes, drills and games, better preparing them for the future in this high technology age...
- solve scientific calculations in a minimum amount of time and store those calculations for future use, saving countless hours of repetitive work...



- create and update a personal investment portfolio, maintaining transaction records on stocks, bonds and other financial assets...
- access the Dow Jones News/Retrieval Service to obtain selected business news—from 90 seconds to 90 days ago—day or night...
- write computer programs tailored specifically to your needs, even if you have no programming experience.

Apple Makes It Easy

To help meet your specific needs, Apple and many other companies offer a wide variety of programs for use with your Apple II or II Plus system. Programs from the Apple Software Bank are packaged with detailed reference manuals which will teach you, step-by-step, how to use each program. Simply read through each manual, following the instructions and completing all the exercises. Your hands-on experience makes it easy to become an expert.

Discover The World Of Programming

If you can't find a suitable program for your needs, or if you simply want to explore and master today's newest technology, you can free your creative spirit and write your own computer programs—even if you've never written one before. Programming is exciting and easy with the Apple Computer System. The only requirement is that you "talk" to the computer in a language it understands. A BASIC language is built into each Apple Computer System: Applesoft Floating-Point BASIC in the Apple II Plus, and Integer BASIC in the Apple II. You'll receive the appropriate programming manual when you purchase your system. Your manual will lead you

through the Applesoft or Integer BASIC programming steps, defining and explaining your Apple's simple "vocabulary." After you have read the manual and performed the exercises, you'll be ready to program. It's easy with Apple!

After you have written a program, you can save it for future use simply by storing it on a floppy diskette. Your program is ready to use again and again.

Apple Offers Even More

In addition to extensive software and ease of programmability, Apple also...

- allows you to expand your system as your needs grow, because of its modular method of adding memory and accessories...
- prompts you for input, warns you of errors, and lets you explore music and speech applications with its sound capability...
- heightens your interest with its color graphics capability...
- offers safety and durability, because it is UL-approved as a unit and housed in a rugged, molded case...
- travels with you, because it is lightweight and portable...
- assures you of low service costs, because its components are easily accessible and socket-mounted for quick replacement...
- offers you exceptional reliability,



because of its built-in engineering excellence.

Standard Features

Apple II and II Plus Personal Computer Systems provide these standard features:

- a built-in BASIC language (Integer BASIC in the Apple II, Applesoft BASIC in the Apple II Plus);
- built-in disassembler;
- a ROM-based system control program;
- color graphics and sound capabilities;
- sockets for up to 48K bytes of user memory (RAM); 64K with the plug-in Language System;
- cassette interface;
- game input/output connector, and two hand controls for games and other human-input applications;
- typewriter-style ASCII keyboard;
- high-efficiency switching power supply;
- eight accessory expansion slots.

Additionally, Apple II computers have a single-pass assembler, simulated single-step and trace modes, and breakpoint handling.

Apple II Plus computers feature automatic start-up in BASIC, and optional automatic execution of any disk program on start-up.

Technical Specifications

Video Display:

Through software selection, an Apple displays text and high-resolution graphics and, when connected to a color monitor or television, color graphics. Its graphics commands allow either of two screen "pages" to be displayed, with four lines of text below the display area.

Text Mode

- 40 characters/line, 24 lines
- 5x7 dot matrix, upper-case characters
- normal, inverse or flashing characters
- extensive display control software in ROM
- full cursor control—protected screen feature

—fast display—1000 cps

Color Graphics Mode

- 40hx48v resolution (40hx40v with four lines text)
- 15 colors
- High Resolution Graphics Mode
- 280hx192v black/white resolution (or 280hx160v with four lines text)
- six colors: black, white, violet, green, blue, orange (color resolution is 140hx192v or 160v)

Memory:

- User Memory (RAM)
- organized in 16K-byte increments
- easily expanded by inserting memory elements into plug-in sockets
- up to 48K RAM can be installed without requiring expansion chassis
- an additional 16K RAM can be installed through use of the Language System (a plug-in card), for a total of 64K RAM
- Language Memory (ROM)
- up to 12K of Language Memory, organized in six blocks of 2K bytes each; 2K used for System Control

System Control:

- disassembler;
- automatic input/output device assignment;
- keyboard and screen editing features;
- register examine/modify and read/write cassette routine;
- hex add/subtract for relative branch calculations.

Inputs And Outputs:

- typewriter-style ASCII keyboard;
- cassette interface—1500 bps;
- eight peripheral board connectors, fully buffered, with interrupt and DMA priority structure;
- game I/O: four analog-to-digital inputs, three TTL inputs and four TTL outputs.

Physical Dimensions (Nominal):

Weight: 5kg (11 pounds)
Height: 11.4 cm (4½ in)
Depth: 45.7 cm (18 in)
Width: 39.4 cm (15½ in)

The Apple II Package

Order Nos.

U.S. European
A2S0016 A2S0016P (16K Bytes RAM)
A2S0032 A2S0032P (32K Bytes RAM)
A2S0048 A2S0048P (48K Bytes RAM)

With your order for any Apple II System, you will receive:

- Apple II, with memory as ordered, and features as specified in STANDARD FEATURES section above;
- Two (2) hand controls (game paddles);
- AC power cord;
- Cassette cable;
- Apple II Reference Manual;
- Apple II BASIC Programming Manual.

The Apple II Plus Package

Order Nos.

U.S. European
A2S1016 A2S1016P (16K Bytes RAM)
A2S1032 A2S1032P (32K Bytes RAM)
A2S1048 A2S1048P (48K Bytes RAM)

With your order for any Apple II Plus system, you will receive:

- Apple II Plus, with memory as ordered, and features as specified in STANDARD FEATURES section above;
- Two (2) hand controls (game paddles);
- AC power cord;
- Cassette cable;
- Apple II Reference Manual;
- Applesoft BASIC Reference Manual;
- Applesoft Tutorial Manual.



The Apple III Personal Computer System

The Most Powerful Professional Computer System In Its Class

The Apple III is a powerful, desktop computer system available as part of custom-tailored packages designed to solve your complex application needs. For managers, financial planners, analysts, and others who need to organize facts and figures, there's the Apple III Information Analyst System. It offers special features that make it the most powerful, easy to use timesaver available. For administrators and professionals who need a powerful, word processing capability, there's the Apple III Word Processor. It offers state-of-the-art capabilities that rival those of systems selling for \$10,000 and more. Other Apple III system configurations can be tailored to meet your specific needs.

Powerful Solutions For Complex Applications

The Apple III Computer System has been designed to tackle the tasks that keep you from being as productive as you'd like to be. With an Apple III, you can...

- plan budgets, compare actuals with forecasts, and modify projections...
- calculate rate-of-return, pro formas, and financial statements...
- develop highly accurate forecasting models and pricing strategies...
- create scientific and engineering models and study causes, effects, and trade-offs...
- compose, revise, and print all kinds of documents—from memos and brochures to form letters and book-



length manuscripts—quickly and easily...

- maintain and update comprehensive mailing lists, sort them by name, zip code, or special key, and selectively print mailing labels...
- write complex computer programs in a variety of languages, including Apple Business BASIC, and Pascal.

Professional Features For Professional Needs

In addition to its outstanding applications software, the Apple III offers a powerful operating system and all the hardware features professionals look for.

Apple III's Sophisticated Operating System (SOS)

Designed to control all of the Apple III's hardware for you, SOS updates and reads the time and date from the system clock, handles interrupts, manages the system's memory and peripherals, provides the foundation for graphics, and performs comprehensive file management.

Apple III's Keyboard

The typewriter-style, Apple III keyboard has been sculptured for maximum typing speed and accuracy. It contains 61 alpha keys and a separate, 13-key numeric pad.

Four, dedicated cursor control keys provide single-keystroke cursor movement; each key also fast repeats when held down, so that you can move quickly from point to point in the text. The alpha-lock key shifts only the alphabetic keys into upper case, leaving the number row unaltered. To speed numeric data entry, the layout of the numeric keypad is identical to that of a standard calculator.

Apple III's Disk Drive

A built-in, 140K byte, flexible disk drive makes the Apple III a compact, space-saving unit. System expansion is cost effective, too, because you can add up to three external disk drives without the need for additional control hardware or software.

Apple III's Back Panel

The system's back panel (as well as most of its case) is formed of diecast aluminum. The aluminum fins on the back of the unit keep the system cool and eliminate the need for a fan.

Most peripheral devices plug directly into the Apple III's back panel connectors. Additionally, there are four, large slots in the back panel for input/output connectors mounted on optional peripheral cards.

As many as three expansion floppy disk drives can be used with the Apple III. The first additional drive plugs into the "floppy disk" connector on the system's back panel; then, in "daisy-chain" fashion, the second drive plugs into the first, and the third plugs into the second.

Back panel connectors are also provided for two Apple III "joysticks." Application programs can be designed to take advantage of a joystick (for example, to move the cursor around the screen, or to point to displayed items). Additionally, one of the joystick connectors can alternately be used to connect a Silentyper thermal printer to the Apple III.

Apple III's Input/Output Connections

The Apple III allows you to use a wide variety of video display devices. The high resolution, black-and-white, Apple III Monitor connects to the system by high-frequency cable, which plugs into a jack on the Apple III's back panel. Color video monitors—including NTSC (standard) color, and RGB (for exceptional color purity and resolution) attach to the Apple III by means of a 15-pin connector that provides all the power and signals necessary.

Built into the Apple III is a two-inch speaker, which produces sound of such high quality that it can even be used to generate voice. An audio output jack located on the back panel of the Apple III also allows for connection of a

separate earphone or external speaker; plugging into this jack silences the Apple III's built-in speaker.

An RS-232C connector, also located on the Apple III's back panel, provides for direct attachment of many types of "serial" input/output devices. For example, your Apple III can "call" other computers and data banks by phone line, using a modem. Or you can quickly add a variety of high-speed or letter-quality printers—even other terminals or computers—to your system, simply by plugging them into the RS-232C connector.

Inside the Apple III

Removing the top cover reveals the peripheral card expansion section of the Apple III. Up to four different peripheral cards can be used at one time to supplement the Apple III's built-in peripheral interfaces.

For optimal computing speed, the Apple III's CPU can be "interrupted" by your system's peripheral devices whenever they require CPU control. Alternately, the CPU can also poll the devices to determine which need attention—thereby minimizing the



software required for peripheral control.

The Apple III also contains many features that enhance its utility—including an extremely useful, built-in clock/calendar with its own long-life batteries. Once set, the clock/calendar maintains the correct time and date, whether the system is turned on or off.

Also built into the Apple III are a number of powerful text, graphics, and color capabilities. In all text modes, for instance, the character set that appears on your monitor can be chosen from several available fonts. Special characters, graphics symbols, and even foreign language character sets can be selected quickly and easily from a diskette, and used by any program on the computer.

Through the Apple III's professional display, you view 80 characters by 24 lines of black and white characters. The system can also display 40 characters by 24 lines of color text, on color background, to add dramatic emphasis to programs.

Along with various text modes, several graphic modes are also

available with the Apple III, including an ultra-high resolution, black-and-white mode. Up to 16 different colors are available in the high resolution color mode, and even higher resolution color can be generated by restricting color changes slightly. On a black and white monitor, color is displayed as 16 different shades of grey, making it easy for you to use shading and high lighting to enhance and emphasize your displays.

The Apple III also has an Apple II emulation mode for those users who already have an investment in Apple II

software. This mode enables you to run most Integer BASIC and Applesoft programs on your Apple III. (Minor modifications are required for Apple II programs which use the game paddles, however.) Because the Apple III in emulation mode behaves exactly like an Apple II or Apple II Plus, the screen will display 40-character by 24-line text.

Technical Specifications

Physical Dimensions:

Height: 12.20 cm (4.8 in)
Depth: 46.22 cm (18.2 in)
Width: 44.45 cm (17.5 in)
Weight: 26 pounds (11.8 kg)
Cast aluminum base with molded plastic.

Processor:

Apple-designed processor utilizes 6502A as one of its major components. Other circuitry provides extended addressing capability, relocatable stack, zero page, and memory mapping.

Emulation Mode:

Provides hardware emulation of 48K byte Apple II or Apple II Plus. Allows most Apple II programs to run without modification.

Clock Speed:

1.8 MHz with video off, 1.4 MHz average;
1.0 MHz in emulation mode.



Main Memory:

96K (98,304) eight-bit bytes, minimum;
128K (131,072) bytes, maximum;
dynamic RAM memory.

ROM Memory:

4K (4,096) bytes used for self-test diagnostics.

Power Supply:

High-voltage switching type
+5, -5, +12, -12 volts

Mass Storage:

One 5.25 inch floppy disk drive built-in;
140K (143,360) bytes per diskette.
Up to three additional drives can be connected by daisy-chain cable (560K bytes on-line storage).

Keyboard:

74 keys (61 on main keyboard, 13 on numeric pad);
Full 128-character, ASCII encoded;
All keys have automatic repeat;
Three special keys: SHIFT, CONTROL, ALPHA LOCK;
Two user-definable "Apple" keys;
Four directional arrow keys with two-speed repeat;
Four other special keys: TAB, ESCAPE, RETURN, ENTER.

Screen:

Three upper/lower case text modes:
80 column, 24 line, black-and-white;
40 column, 24 line, 16 color foreground and background;
40 column, 24 line, black-and-white;
All text modes have a software-definable, 128-character set (includes upper and lower case) with normal or inverse display.

Three graphics modes:

280x192, 16 colors (with some limitations);
140x192, 16 colors;
560x192, black-and-white;
plus Apple II Modes.

Video Output:

RCA phono connector for NTSC black-and-white composite video;
DB-15 type connector for:
NTSC black-and-white composite video;
Four TTL outputs for generating RGB color;
Composite sync signal;
NTSC color composite video;
+5, -5, +12, -12 volt power supplies;

Color signals appear as 16-level grey scale on black-and-white video outputs.

Audio Output:

Built-in two-inch speaker;
Miniature phone-tip jack on back panel;
Driven by six-bit digital/analog converter or fixed-frequency "beep" generator.

Serial I/O:

RS-232C compatible, DB-25 female connector;
Software selectable baud rate and duplex mode.

Joysticks:

Two DB-9 connectors for two joysticks with pushbuttons.

Printer:

One DB-9 connector (shared with second joystick) for Apple Silentype printer.

Clock:

Can be set and read from programs;
Powered by long-life, replaceable, watch batteries;
Keeps track of month, date, day of week, and exact time to 1/1000th of a second.

Expansion:

Four, 50-pin expansion slots inside the cabinet.

SOS:

Sophisticated Operating System handles all system I/O;
SOS can be configured to handle standard or custom I/O devices and peripherals by adding or deleting "device drivers."
All languages and application programs access data through the SOS file system.

Languages:

Apple Business BASIC and Pascal.

The Apple III Package

Apple III Information Analyst:

Order No. A3P0001 (Option A)

Order No. A3P0002 (Option B)

Order No. A3P0003 (Option C)

Apple III Word Processor:

Order No. A3P0004 (Option A)

Order No. A3P0005 (Option B)

With your order for any Apple III configuration, you will receive:

■ Apple III Professional Computer System with built-in disk drive, keyboard, clock/calendar, serial (RS-232C) and Silentype printer interfaces, and either 96K bytes RAM (Information Analyst, 128K bytes optional) or 128K bytes RAM (Word Processor);

■ Apple's Sophisticated Operating System (SOS) package, with:

—System Owner's Guide;
—DOS 3.3 diskettes;
—DOS 3.3 instruction manual;
—Standard Drivers Manual.

■ Apple's Business BASIC programming software package, with:
—Business BASIC diskettes;
—Instruction manual.

Plus the following (based on the configuration ordered):

Apple III Information Analyst

In addition to the basic hardware and software, with your Apple III Information Analyst order you will also receive:

■ VisiCalc™ III software package, with:
—VisiCalc III diskette;
—VisiCalc III manual;
—Toolkit sampler diskette (with prewritten VisiCalc III worksheets to help you get started);
—Toolkit sampler manual.

■ Apple III Monitor (black & white);
■ Second disk drive (Disk II for Apple III—with options B and C);
■ Apple Silentype thermal printer (with option C);
■ All necessary cabling, accessories, and blank diskettes to put your system to work immediately.

Apple III Word Processor

In addition to the basic Apple III hardware and software, with your Apple III Word Processor order you will also receive:

■ Word Painter software package, with:
—Word Painter diskettes;
—Word Painter instruction manual;
—Word Painter keycap set and keycap installation tool.

■ Mail List Manager software package, with:

—Mail List Manager diskettes;
—Instruction manual.

■ Second disk drive (Disk II for Apple III);

■ Apple III Monitor (black & white);
■ Apple Silentype thermal printer (Option A); or
■ Qume Sprint 5 daisy-wheel printer (Option B);

■ All necessary cabling, accessories, and blank diskettes to put your system to work immediately.

The Apple III Word Processor

A System Beyond Words

Available second quarter 1981

The Apple III Word Processor is a sophisticated personal computer system designed especially for word processing. Its Word Painter software allows you to create and edit letters, memos, reports, manuals—even books—quickly and easily. And its Mail List Manager software helps you communicate more effectively with customers and business associates by making it easy to create, store, update, and print mailing labels, and address and phone lists. The 80-character/line, upper/lower case display gives you an accurate picture of what your text will look like when it's printed, while the system's sculptured keyboard makes the transition from a typewriter smooth and simple.

Reliable, powerful, and reasonably priced, the Apple III Word Processor will help you streamline clerical operations and improve productivity from the minute you turn it on.

**Benefits****The Apple III Word Processor...**

- simplifies document formatting, because its large 80-character/line by 24-line display gives you an accurate picture of what your printed documents will look like...
- minimizes training by providing a natural transition from the standard typewriter...
- increases your efficiency, because of its convenient, built-in disk drive...
- maximizes your word processing productivity, because of its powerful Word Painter software...
- reduces expansion costs, because up to three external disk drives can be added without additional control hardware or changes in software...
- makes data retrieval easier, because its built-in clock/calendar automatically identifies disk files with the correct date and time of their creation or last revision...
- saves you money, because its cost-effective Mail List Manager program lets you inexpensively create, sort, update, and print mailing labels and phone lists...
- increases system flexibility, because of its compatibility with a variety of draft- and letter-quality printers.

The Apple III Word Processor—A Closer Look

Tools are as useful as they're usable—and the Apple III Word Processor is the first personal computer human-engineered for word processing. The sculptured, typewriter-style keyboard is a model of utility and convenience, with a familiar layout and some special features that allow you to move almost effortlessly from point to point in the text.

At the heart of the Apple III Word Processor is Word Painter, Apple's powerful word processing software. With Word Painter, you can perform normally time-consuming operations—such as centering, indenting paragraphs, searching for and replacing text—quickly and automatically.

To preserve your documents, the Apple III Word Processor incorporates a number of convenient, built-in features, including a floppy disk drive. This highly reliable disk drive lets you store—and quickly retrieve—up to 140K bytes of data per diskette. And as your needs expand, you can "daisy-chain" up to three additional, external drives to your system, without adding any control hardware or software.

Another truly convenient feature of the Apple III Word Processor is its built-in clock/calendar, which automatically date/time stamps files,

records when a letter is written, and notes (per your instruction) whether a particular draft is the final one. The clock/calendar has its own long-life batteries, so the system stays on time, even when it's unplugged.

When your documents are ready for printing, the Apple III Word Processor makes your job simple, and ensures that the results are letter-perfect. For draft-quality printing, Apple's Silentyper thermal printer is quiet, reliable, and cost-efficient—and plugs directly into the Apple III. For letter-quality printing, you can choose from a number of different printers—including Apple's popular daisywheel model (Qume Sprint 5). Because many printers offer a variety of type fonts, you can tailor your documents quickly and easily for the "look" you want.

The Apple III Word Processor—the affordable answer to your word processing needs.

Technical Specifications

Keyboard:

Textured, non-glare, non-slip keytops, with raised dots on "D" and "K" keys for quick positioning; Alpha Lock shifts and locks alphabetic characters only, leaving all other keys unaffected.

Display:

12", high-resolution, video monitor, with up to 24 lines of 80 characters/spaces per line, upper/lower case, and high resolution graphics capability.

Storage:

Approximately 60 pages of text per diskette; system supports up to four daisy-chained disk drives (including the Apple III's built-in unit), for a total of 560K bytes.

Applications Software:

Word Painter, written in UCSD Pascal™ and Apple III assembly language; Mail List Manager, written in UCSD Pascal.

The Apple III Word Processor Package Order No. A3P0004 (Option A)

Order No. A3P0005 (Option B)

With your Apple III Word Processor order, you will receive:

- The Apple III Professional Computer System, with built-in disk drive, keyboard, clock/calendar, serial (RS-232) and Silentyper thermal printer interfaces, and 128K bytes RAM;
- Apple's Sophisticated Operating System (SOS) package, with:
 - System owner's guide;
 - System utilities diskette;
 - Standard drivers manual;
- Word Painter software package, with:
 - Word Painter diskettes;
 - Word Painter instruction manual;
 - Word Painter keycap set and keycap installation tool;
- Apple's Business BASIC programming software package, with:
 - Business BASIC diskettes;
 - Instruction manual;
- Mail List Manager software package, with:
 - Mail List Manager diskettes;
 - Instruction manual.
- Second disk drive (Disk II for Apple III);
- Apple III Monitor (black & white);
- Apple Silentyper thermal printer (Option A); or
- Qume Sprint 5 daisy-wheel printer (Option B);
- All necessary cabling, accessories, and blank diskettes to put your system to work immediately.

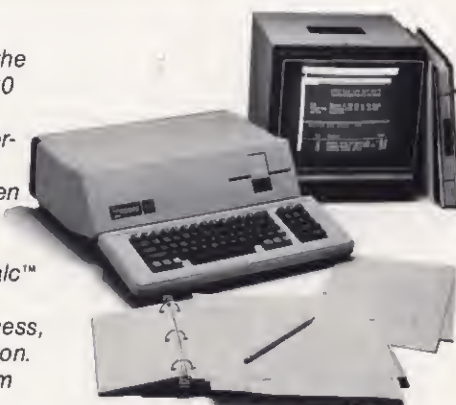
The Apple III Information Analyst

More Than A Worksaver

The Apple III Information Analyst is a highly integrated, personal computer system designed especially for professionals who work with facts and figures. It is built around the power and flexibility of the Apple III computer, with its big, 12-inch (diagonal) video monitor, 80 character, upper/lower case display, and high-resolution, color graphics capabilities. Other important features include a calculator-style, numeric keypad, built-in disk drive and clock/calendar, and integrated system interfaces for quick, inexpensive expansion when your needs require it.

The Apple III Information Analyst comes complete with two versatile software packages: Apple Business BASIC, and VisiCalc™ III. Apple Business BASIC—Apple's advanced, multifeatured version of the popular BASIC language—handles complex business, scientific, and engineering programming with speed and precision. VisiCalc III, the "electronic worksheet," lets you solve any problem that can be organized into rows and columns quickly and accurately.

More than a worksaver, the Apple III Information Analyst gives you the competitive edge you need to excel as a professional in budgeting, forecasting, scheduling, accounting, and other critical business and program management areas.



Benefits

The Apple III Information Analyst...

- increases your productivity by providing a variety of features and programs that dramatically reduce the amount of time required to perform routine tasks...
- reduces your programming time, because its feature-packed Apple Business BASIC language lets you write long, complex programs with maximum efficiency...
- extends your decision-making capabilities, because its VisiCalc III software lets you ask "What if...?" questions, and instantly calculate the results of different approaches to planning and modeling problems...
- increases the value of your time, because its powerful, problem-solving and worksaving benefits give you marketable advantages over competitors.

The Apple III Information Analyst—A Closer Look

The Apple III Information Analyst is designed for the professional manager who can't afford to waste time—or make mistakes on important decisions. Human-engineered for ease-of-use, the Information Analyst's handy, integrated keypad lets you quickly enter large blocks of figures and data. And the sculptured, typewriter-style Apple III keyboard incorporates several editing and cursor movement features that make it easier to enter text and write programs.

The real strength of the Apple III Information Analyst lies in its powerful software. You can use Apple Business BASIC to write programs tailored to your needs. And you can use VisiCalc III to prepare marketing forecasts, budgets, pricing strategies, and more.

To preserve your data, the Apple III Information Analyst incorporates a number of convenient, built-in features, including a disk drive. Highly reliable, it lets you store and quickly retrieve up to 140K bytes of data per diskette. And as your needs expand, you can daisy-chain up to three additional, external drives to your system, without adding any control hardware or software.

Another handy, built-in feature of the Apple III Information Analyst is its clock calendar, which conveniently date stamps your files—

thereby providing an especially useful way to distinguish among revisions. Also, programs with calculations that incorporate the current date or time (interest calculations, for example) can be designed to access the system directly for the data, instead of requiring an operator input. The clock/calendar has its own long-life batteries, so the system stays on time, even when it's unplugged.

When you're ready to print your forecasts, budgets, schedules, mailing labels, and other documents, the Apple III Information Analyst performs with letter-perfect results. One of its built-in printer ports lets you simply plug in and print with Apple's quiet, reliable Silentype thermal printer. And another built-in printer port lets you easily connect your Apple III Information Analyst to a wide variety of high-speed printers.

Whether you're an engineer modeling with computer simulations, or a marketing manager preparing five-year sales forecasts, the Apple III Information Analyst can save you time, improve your results, and polish your professional image.

Technical Specifications

Keyboard/Keypad:

Textured, non-glare, non-slip keytops, with raised dots on "D," "K," and "5" keys for quick positioning; separate numeric keypad for calculator-style numeric entry.

Display:

12", high-resolution, video monitor, with up to 24 lines of 80 characters/spaces, and upper/lower case; color and high-resolution graphics capabilities for plotting, graphs, and other applications.

Storage:

System supports up to four, daisy-chained disk drives (including the Apple III's built-in unit), for a total of 560K bytes.

Applications Software:

Apple Business BASIC and VisiCalc III, written in Apple III assembly language.

The Apple III Information Analyst Package Order No. A3P0001 (Option A)

Order No. A3P0002 (Option B)

Order No. A3P0003 (Option C)

With your Apple III Information Analyst order, you will receive:

Option A

- Apple III Professional Computer System, with built-in disk drive, keyboard and numeric keypad, clock/calendar, serial (RS-232) and Silentype printer interfaces, and 96K bytes RAM (128K bytes optional);
- Apple's Sophisticated Operating System (SOS) package, with:
 - System Owner's Guide;
 - System utilities diskette;
 - Standard Drivers Manual;
 - DOS 3.3 diskettes;
 - DOS 3.3 instruction manual.
- Apple Business BASIC programming software package, with:
 - Business BASIC diskettes;
 - Instruction manual.
- VisiCalc III software package, with:
 - VisiCalc III diskette;
 - VisiCalc III manual;
 - Toolkit sampler diskette (prewritten VisiCalc III worksheets to help you get started);
 - Toolkit sampler manual.
- Apple III Monitor (black & white);
- All necessary cabling, accessories, and blank diskettes to put your system to work immediately.

Option B

Same as Option A, plus:

- Second disk drive (Disk II for Apple III).

Option C

Same as Option A, plus:

- Second disk drive (Disk II for Apple III);
- Apple Silentype thermal printer.

The Controller

Revision 1.1
Small Business Management and Accounting

The Controller is a comprehensive accounting system that enables the small business owner to manage his business more effectively. Not only does the system allow better planning of payments and faster cash collection, it also generates timely reports which allow the owner to act quickly, if necessary, on items affecting the financial health of the business. And, through Revision 1.1, The Controller offers improved processing speed (approximately 25%) over the previous version, and compatibility with the user's choice of several printers.

Consisting of three modules—Accounts Receivable, Accounts Payable, and General Ledger—The Controller also offers an easy, effective alternative to manual bookkeeping. It's flexible as well: the Accounts Payable and Receivable systems may be used either independently or in conjunction with the General Ledger.

Discover the easier way to more effective cash and accounting management—put the Controller to work in your business.



Benefits

The Apple Controller...

- allows you to easily trace any transaction because it automatically prints audit trails...
- warns you of data entry errors and prompts you for further instructions through audio feedback ("beeps")...
- identifies and monitors slow paying customers through its account aging feature...
- assists you in planning cash needs for expenditures, and allows you to take advantage of discounts and "net" terms, because it tracks accounts payable by due date...
- shortens bookkeeping time required to maintain accurate records, because it automatically posts and updates...
- reduces bookkeeping errors by eliminating redundant writing, calculating and typing, and automatically printing management summaries, detailed reports, vendor and customer lists, mailing labels, account statements, and archival copies of each month's data for historical records...
- assists in maintaining complete, accurate and consistent records, because it encourages the use of standard bookkeeping practices...
- reduces the time required to process your accounts and makes information available to you when you need it through the power of your Apple Computer...
- protects you from losing important business information by automatically making a back-up copy of all operational data after posting.

The Controller— A Closer Look

To assist you in determining if The Controller is appropriate for your accounting needs, this section describes each system module by its menu, including numeric and financial limits. If your business fits within these limits, The Controller is probably just the package for you.

The Accounts Receivable, Accounts Payable and General Ledger menus include three common options. The first of these is **Customizing Features**, a program which allows you to configure the system to your business needs, for example, whether finance charges should be calculated and at what percentage rate. The second is **Utilities**, a set of computer programs that enable you to make back-up copies of your diskettes; restore diskettes that have been damaged in some way; and determine how many entries you have made and the amount of diskette space remaining. **Change Today's Date** allows you to change the date each time you use the selected module.



Accounts Receivable (A/R) System Module

After selecting "Accounts Receivable" from the Controller's main menu, your screen will display the Accounts Receivable menu.

Customer Master allows you to establish and maintain an up-to-date listing of your customers. You may store data for up to 250 customers on each diskette (to a recommended maximum of three diskettes, or 750 customers).

Sales Entries enables you to enter your sales by batch (up to a maximum of 100 per batch at any one time), and print reports for proofing. Sales adjustments can also be entered at this time.

Payment Entries permits you to record payments made by your customers. Payments may be entered in batches (up to a maximum of 100 entries per batch at any one time). As with Sales Entries, adjustments can also be entered at this time.

As you post, both the Sales and Payment Entries are put into summarized forms, so that they may be later transferred automatically to the General Ledger should you choose to do so. One hundred Transfer Journal Entries, may be made at any one time from the A/R program to the General Ledger.

Aged Trial Balance keeps track of outstanding balances, appropriately distributing them among four aging periods: current, 31–60 days, 61–90 days, and over 90 days. It also prints three different reports. The first is a Summary Report, showing customer information, account balance by aging periods, and the total amount due. The second, Detail Report, includes the same information as the Summary Report, as well as the balance forward for the month and current monthly transactions. The Monthly Activity Report details the business's total activity for the month by transaction, including sales, taxes and other amount categories. For audit purposes, the Detail Report must be printed before you can close the month.

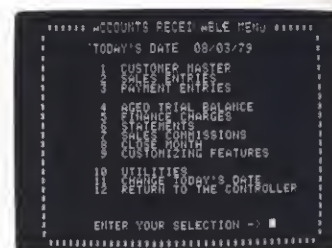
Finance Charges is an optional feature which automatically computes, on a monthly basis, the finance charge percentages against your customers' balances. You are prevented from running Finance Charges more than once a month, and before you have posted Sales and Payment entries.

With the Accounts Receivable module, the total of finance charges, sales, or payment entries should not exceed 750 per diskette per month.

Statements generates computer-printed customer account statements. You may print up to 250 per month; the largest single balance for any one customer per aging period is \$90,000.00.

Sales Commissions prints a report by salesman number detailing the amounts a business owes its commissioned salespeople, based on their individual sales for the month.

Close Month initiates the procedure that ends the monthly business cycle for billing. It eliminates all detailed transactions from Accounts Receivable and transfers the totals to the balance forward amount for the next month. Outstanding Accounts Receivable are aged automatically by one month.

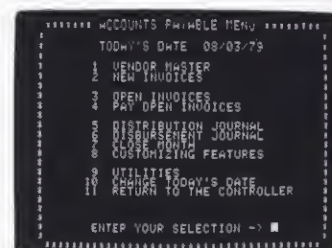


Accounts Payable (A/P) System Module

After selecting "Accounts Payable" from the Controller's main menu, your screen will display the Accounts Payable menu.

Vendor Master allows you to create a master file of all vendors with whom you do business. The vendors may be temporary or permanent, and you may have up to 125 vendors at one time. You can add, change, examine and remove vendors from the master file, and print a Vendor Master report and vendor labels at any time.

New Invoices enables you to enter data for up to 300 invoices with distribution to twelve General Ledger accounts. The number of available invoice records is decreased for distributions more than three in number. For example, if an invoice is distributed to nine accounts, the computer will subtract three invoice records from the total available. Processing options for New Invoices include adding, changing, displaying, and removing entries. Each invoice will be



assigned a "voucher number" and you can print a proof report at any time to double-check the data before posting.

Pay Open Invoices directs the computer to print as many as 3000 checks in any one month for all invoices with a due date less than or equal to the date you enter as Check Date. It also prints a Paid Invoices Register to keep track of all checks printed and posted. Up to 300 open invoices may be in the A/P system at any time. If you have chosen not to use your Apple to print checks, this selection can still be used to post the handwritten checks.

Distribution Journal allows you to post account distributions, print a report of all invoices by the respective accounts, and create all of the entries that will be transferred to the General Ledger. Up to 100 Transfer Journal Entries may be made to the General Ledger system at any one time. You will be required to post at least once before you close the month.

Disbursement Journal is a printed report that details what checks have been written, to whom, the check date/number/amount, and any discount received. The three accounts affected by the process are: Accounts Payable and Cash in Bank, which are reduced, and Vendor Discounts Taken, which increases (if a discount for prompt payment was offered).

Close Month is the process that ends each monthly business cycle. Before you are allowed to close the month, the system will check to be sure that certain processing functions have taken place, and that the corresponding reports have been printed. The system will also require you to make back-up copies of your data diskettes before and after closing the month.

General Ledger (G/L) System Module

After selecting "General Ledger" from the Controller's main menu, your screen will display the General Ledger menu.

Chart of Accounts permits you to add, change, and remove accounts, as well as to print and display them on your screen. The General Ledger system can handle up to 250 accounts, with a maximum recommended balance of \$90,000,000.00 per account.

Standard Entries is reserved for those same amounts posted to the same accounts each month, such as rent. Once these are established, you need only post them as a batch once each month, eliminating the need to retype individual entries every time. You can add, change, remove, print, and post the standard entries.

Journal Entries is used to make and adjust entries to the General Ledger. Processing options include adding, changing, removing, printing, and posting entries.

The General Ledger system can handle up to a total of 700 Journal Entry transactions and 50 Standard Entry transactions per month.

Transfer Journals transfers data from the Accounts Receivable and Payable systems into the General Ledger.

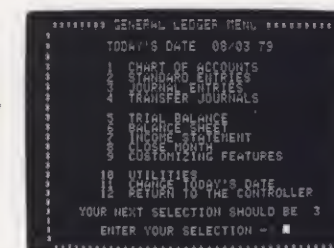
Trial Balance may be run to determine if total debits equal total credits. It may be run any time you choose provided there are no unposted Journal Entries. The Trial Balance option will also print summarized and detailed reports.

Balance Sheet is used to present the financial health or status of a business at any specific time. It prints both summarized and detailed reports.

Income Statement details the revenues and expenses of a company over a period of time. The Income Statement is often known as "the bottom line" or the Profit and Loss (P&L) statement. This program prints both a summarized and detailed report.

Close Month begins the process that ends each monthly business cycle. Before you are allowed to close the month, you will be required to complete certain processes and print specific reports. Closing the month will also initiate closing the year when the month-end and fiscal year-end dates coincide.

If you are using either or both Accounts Receivable and Accounts Payable in conjunction with the General Ledger, the items you have



customized and the date you have specified must be identical within the system modules.

System Configuration

To use The Controller, you will need the following system:

- Apple II (with Applesoft Firmware Card and Auto-Start ROM) or Apple II Plus, with 48K of memory;
- Two (2) Apple II Disk Drives, one with controller;
- Video monitor (preferred) or television set.
- A compatible printer and printer controller card*.

*Note: Apple II computer systems and Revision 1.1 of The Controller work with several printers and printer controller cards, including those specified below:

■ Qume Sprint 5 (A2M0045)
Card: High Speed Serial Interface Card (Apple Product A2B0005) with P8-02 PROM
Forms Tractor: Apple Product A2M0047
■ Centronics 779 (A2M0011)
Card: Centronics Printer Interface Card (Apple Product A2B0007, included if printer is purchased from Apple Computer Inc.)

Technical Specifications

Recommended Limits:

General Ledger

Number of Accounts	250
Journal Entries Per Month	700
Standard Entries Per Month	50
Entries in One Batch	100
Different Journal Numbers	700
Amount of Any One Entry	\$9,000,000.00
Amount of Any One Batch	\$9,000,000.00
Balance in Any One Account	\$90,000,000.00

Accounts Receivable

Customers per Data Diskette	250
Monthly Transactions per Diskette	750
Statements per Diskette	250
Account Transfers to G/L	100
Transactions per Batch	100
Number of Salespeople	99
Number of Diskettes	3
Customer Balance	\$360,000.00
Any Customer Aging Period	\$90,000.00
Any One Sale Amount	\$90,000.00
Any One "Other" Amount	\$9,000.00
Any One Tax Amount	\$999.99
Amount of Any One Batch	\$9,000,000.00

Accounts Payable

Number of Vendors	125
Number of Open Invoices	300
Checks Printed per Month	300
Invoices per Batch	100
Monthly Transfers to G/L	100
Distribution Accounts per Invoice	12
Amount of One Transaction	\$999,999.99
Amount Owed per Vendor	\$999,999.99
Amount of Any One Batch	\$9,000,000.00
Discount Amount per Invoice	\$9,999.99

Language:

Written in Applesoft BASIC.

Reports Generated by The Controller:

General Ledger:

Chart of Accounts (no Balances)	Balance Sheet (Summary)
Chart of Accounts (with Balances)	Detail Balance Sheet
Chart of Accounts Changes	Income Statement (Summary)
General Journal Report	Detail Income Statement*
Standard Entries Journal	Income Statement (Summary for Departments)
Trial Balance (Summary)	Detail Income Statement (for Departments)
Detail Trial Balance	

Accounts Receivable:

Customer Master List	Summary Aged Trial Balance*
Customer Mailing Labels	Detail Aged Trial Balance
Sales Journal (by Entry No.)	Monthly Activity Report
Sales Journal (by Document No.)	Statements and Summary
Payment Journal (by Entry No.)	Sales Commission Report
Payment Journal (by Document No.)	

Accounts Payable:

Vendor Master List (by Vendor Name or Number)	Open Invoices by Vendor
Vendor Mailing Labels	A/P Paid Invoice Register
New A/P Invoice Register (by Voucher No.)	Checks and Stubs
New A/P Invoice Register (by Vendor No.)	A/P Distribution Journal
A/P Cash Requirements*	A/P Disbursement Journal

*These are the key reports generated by The Controller. Samples of each are included in The Controller appendix, beginning on page 13.

The Controller Package Revision 1.1 Order No. A2D0012

With your Controller order, you will receive:

- System Master Diskette and one (1) back-up;
- Two (2) General Ledger System diskettes and one (1) back-up for each;
- General Ledger Data Diskette and one (1) back-up;
- Two (2) Accounts Receivable System diskettes and one (1) back-up for each;
- Accounts Receivable Data Diskette and one (1) back-up;
- Two (2) Accounts Payable System diskettes and one (1) back-up for each;
- Accounts Payable Data Diskette and one (1) back-up;
- Four (4) blank diskettes;
- Apple Controller Instruction Manual;
- 36 extra data diskette labels;
- Software License form, including an 800# for toll-free hotline support;
- Three-ring binder;
- Business forms kit sample and order forms;
- Diskette holders.

Accounts Payable Cash Requirements

Obtained via Menu: A/P

Selection: Open Invoices

Purpose: Informs you of the ongoing cash requirements based on due dates for all unpaid invoices. The report produces totals per invoice, totals per due date and running totals for all unpaid invoices.

Sequence: By due date

Item Description

- A** REPORT ID—1306.1—reference this unique identifying number when calling the Hotline
- B** COMPANY NAME—the name of your company
- C** REPORT TITLE—Accounts Payable Cash Requirements
- D** DATE—date you entered for Today's Date
- E** VENDOR NAME—the name of each vendor
- F** VEN NO—vendor number, assigned by computer in Add Vendors
- G** VOUCH NO—voucher number assigned to each invoice
- H** INVOICE NUMBER—entered during New Invoices
- I** INVOICE DATE—the date of the invoice
- J** VOUCHER DATE—the date the invoice was entered
- K** INVOICE TOTAL—total amount of the invoice
- L** INVOICE DISCOUNT—total amount of the terms discount for this invoice
- M** INVOICE NET—amount to be paid to vendor for invoice (M = K - L)
- N** DUE DATE—the date each invoice is due to be paid
- O** DUE DATE TOTALS—total amount of invoices for this due date
- P** DUE DATE TOTALS—total amount of discount for this due date
- Q** DUE DATE TOTALS—total amount of invoice totals minus discount totals for this due date
- R** RUNNING TOTALS—total amount of all invoices accumulated through this due date
- S** RUNNING TOTALS—total amount of all discounts accumulated through this due date

TOP-OF-THE-ICEBERG ICECUBE CO. ACCOUNTS PAYABLE CASH REQUIREMENTS										DATE 02/01/84 PAGE 1
VEN		VOUCH		INVOICE		VOUCHER		INVOICE	INVOICE	INVOICE
NO		NO		NUMBER		DATE		TOTAL	DISCOUNT	NET
E		F G H I J K L M								
CACTUS DELIGHTS		9	9	B4567	01/27/84	02/03/84		80.12	2.40	77.72
				02/06/84				80.12	2.40	77.72
								80.12	2.40	77.72
SUNSHINE ICETRAX CO.		2	1	M2345	01/28/84	02/01/84		1000.00	30.00	970.00
				02/08/84				1000.00	30.00	970.00
								1000.12	32.40	1047.72
AL'S PAPER CUPS		5	4	CM354	01/28/84	02/01/84		50.00--	.00	50.00--
AL'S PAPER CUPS		5	7	Z2213	01/25/84	02/02/84		283.67	.00	283.67
				02/24/84				233.67	.00	233.67
								1313.79	32.40	1281.39
DESERT OASIS WATER CO.		1	5	GB215	01/26/84	02/01/84		900.00	27.00	873.00
				02/25/84				900.00	27.00	873.00
								2213.79	59.40	2154.39
TUGBOAT ICEBERG MOVING		8	6	TM666	01/29/84	02/02/84		227.13	.00	227.13
COLDSTART FREEZER CO.		7	3	B333	01/28/84	02/01/84		1795.00	26.85	1768.15
PETE'S HOT PEPPERS		6	8	T1234	01/29/84	02/02/84		173.42	5.20	168.22
				02/28/84				2195.55	32.05	2163.50
								4409.34	91.45	4317.89

Note: Key reports are shown less than actual size.

T RUNNING TOTALS—total amount of all invoice totals minus all discounts accumulated through this due date	V FINAL TOTALS—total amount of all discounts printed
U FINAL TOTALS—total amount of all invoices minus discounts printed	W FINAL TOTALS—total amount of all invoices minus discounts printed

Detail Income Statement

Obtained via Menu: G/L

Selection: Income Statement

Purpose: This report illustrates the revenue and expenses of your company over a period of time. This report is commonly called the "P and L" or Profit and Loss Statement. All accounts with balances for year-to-date are printed.

Sequence: Numeric by account number

Item	Description
A	REPORT ID—01111.1—reference this unique identifying number when calling the Hotline
B	COMPANY NAME—the name of your company
C	REPORT TITLE—Detail Income Statement
D	DATE—date you entered as Today's Date
E	MONTH-ENDING DATE—current accounting month entered during Close Month or Startup procedures
F	CATEGORIES—Chart of Accounts category, followed by the account description
G	CURRENT MONTH—account total for the current month
H	YEAR TO DATE—account total for year-to-date
I	GROSS PROFIT/LOSS ON SALES—sales less cost of sales for current month
J	GROSS PROFIT/LOSS ON SALES—sales less cost of sales for the year-to-date
K	NET OPERATING INCOME—gross profit less operating expenses for current month
L	NET OPERATING INCOME—gross profit less operating expenses for year-to-date
M	NET INCOME/LOSS—net operating income plus other revenue less other expenses for current month
N	NET INCOME/LOSS—net operating income plus other revenue less other expenses for year-to-date

		TOP-OF-THE-ICEBERG ICECUBE CO. DETAIL INCOME STATEMENT FOR MONTH ENDING 02/29/84		DATE 02/27/84 PAGE 1	
				CURRENT MONTH	YEAR TO DATE
SALES					
SALES - MERCHANDISE				11,400.00	11,400.00
SALES - OTHER				222.42	222.42
TOTAL SALES				11,622.42	11,622.42
COST OF SALES					
TOTAL COST OF SALES				.00	.00
GROSS PROFIT/LOSS ON SALES				11,622.42	11,622.42
OPERATING EXPENSES					
SALARIES - OFFICERS				1,787.50	1,787.50
LEGAL ACCOUNTING FEES				75.00	75.00
RENT				250.00	250.00
DUES & SUBSCRIPTIONS				20.00	20.00
TOTAL OPERATING EXPENSES				2,132.50	2,132.50
NET OPERATING INCOME				9,489.92	9,489.92
OTHER REVENUE					
TOTAL OTHER REVENUE				.00	.00
OTHER EXPENSES					
INTEREST EXPENSE				1,200.00	1,200.00
TOTAL OTHER EXPENSES				1,200.00	1,200.00
NET INCOME/LOSS				8,289.92	8,289.92

Summary Aged Trial Balance

Obtained via Menu: A/R

Selection: Aged Trial Balance

Purpose: Shows who owes money and how current each customer's balance is. Only customers who have balances will be included in this report.

Sequence: Alphabetic by customer name

Item	Description
A	REPORT ID—01207.1—reference this unique identifying number if calling the Hotline
B	COMPANY NAME—the name of your company
C	REPORT TITLE—Summary Aged Trial Balance
D	DATE—date you entered for Today's Date
E	MONTH-ENDING DATE—current accounting month-end date you entered during Close Month or Startup procedures
F	CUST NO—Customer number assigned by the computer
G	CUSTOMER NAME—customer's name

			TOP-OF-THE-ICEBERG ICECUBE CO. SUMMARY AGED TRIAL BALANCE FOR THE MONTH ENDING 02/29/84				DATE 02/28/84 PAGE 1
CUST NO.	CUSTOMER NAME	PHONE NUMBER	0-30 DAYS	31-60 DAYS	61-90 DAYS	PAST 90 DAYS	TOTAL DUE
1084	ABC COCKTAIL CO.	667-0111	.02	.00	.00	.00	.02
1088	HOTHOUSE PLANT CO.	555-1212	50.00	.00	.00	.00	50.00
1001	KENT, CLARK S.	819-4100	600.50	267.74	.00	.00	868.24
1010	MANY A SLIP TWIST CO.	444-0120	112.90	.00	.00	.00	112.90
TOTALS			763.42	267.74	.00	.00	1031.16

H	PHONE NUMBER—customer's phone number, no area code	K	61-90 DAYS—amount of the customer's balance incurred during the 61-90 day aging period
I	0-30 DAYS—amount of the customer's balance incurred during the 0-30 day aging period	L	PAST 90 DAYS—amount of the customer's balance outstanding over 90 days
J	31-60 DAYS—amount of the customer's balance incurred during the 31-60 day aging period	M	TOTAL DUE—the total of all aging periods (I + J + K + L). This is the total amount the customer owes
		N	TOTALS—totals of all customers printed

The Apple Cashier

A New Concept in Store Management

The Apple Cashier offers the small business owner a store management system which can increase profits through improved inventory control and sales entry. Using this system with your Apple II or II Plus, you can create and maintain customer/vendor files; process and monitor sales; order and receive stock; check profits, inventory, and cash; and generate management reports, invoices, and quotations.

Benefits

The Apple Cashier System...

- increases sales revenue and profit by reducing losses caused by theft, since only authorized personnel can access the program to change inventory and financial transaction data...
- eliminates tedious, time-consuming record keeping, since it allows you to expense lost items out of inventory and print expense vouchers; prepare and print purchase orders; and quickly update your inventory file, customer list, and vendor information...
- allows you to easily determine your income from sales, since it automatically tallies daily, monthly and yearly cash and sales totals...
- saves time and labor costs, because it processes sales and updates inventory records after each transaction...
- assists you in determining your optimal inventory levels and reorder quantities, because it analyzes sales rates by item and tracks changes in inventory levels...
- prevents you from losing sales from stockouts by prompting you to reorder when inventory levels become low...
- simplifies the process of updating your accounting records by automatically providing total inventory value...
- increases employee productivity by allowing a clerk to check item availability and verify price without ever leaving the sales desk.

The Apple Cashier—A Closer Look

After initializing the Apple Cashier System's master diskettes (explained in detail in the program instruction manual), the system is ready for use. The Store Management Menu is the main menu of The Apple Cashier; it allows you to access the seven main programs available in the system.

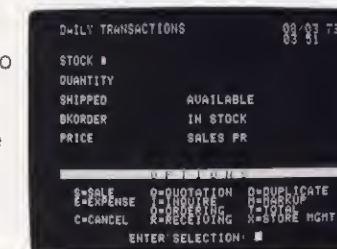
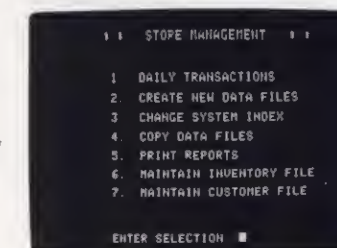
Access CREATE NEW DATA FILES to establish your inventory and/or customer master files. Preformatted screens allow you to insert appropriate information quickly and easily.

After you have created your master files, you can use the other programs in the Apple Cashier System. By selecting the DAILY TRANSACTIONS program from the Store Management Menu, you can process sales (printing invoices and packing slips), prepare quotations, print and record orders, receive and add new inventory to stock, expense items, and update your sales and cash totals.

If you access the MAINTAIN INVENTORY FILE program, you can add new items or change existing products in your inventory file. The MAINTAIN CUSTOMER FILE program allows you to individually access records in the Customer Master File. You can add the names and addresses of new customers, change information on current customers, search for and locate a particular name, or delete any names you wish.

To guard against the remote possibility of loss or destruction of your master diskette files, the Apple Cashier system offers the COPY DATA FILES program (Item 4 on the Store Management Menu), which allows you to make back-up copies of your Index, Inventory, and Customer files. You can make copies as often as they're needed.

Software



Printing information on inventory value, turnover, backorders, item movement, and customers is accomplished by using the PRINT FILES program. There's no lengthy typing time required, since information is automatically printed quickly and letter-perfect.

If you make a system input error while using any one of the programs. The Apple Cashier will stop, display an error code and, in some cases, explain the error to you. It then waits for your correction of the problem before continuing.

System Configuration

To use the Apple Cashier system, you will need the following:

- Apple II (with Applesoft II Firmware Card), or Apple II Plus, each with 48K of memory; or
- Apple II with Apple Language System;
- a minimum of two (2) Apple Disk II drives, one with controller;
- a monitor or television;
- a Centronics printer;
- a Centronics Printer Interface Card (Apple Product A2B0007).

Technical Specifications

Language:

Written in machine language, usable with Applesoft BASIC.

Storage:

Up to 750 inventory line items or customers on a two disk drive system; up to 800 customers and 750 inventory line items each on a three drive system.

Documents and Reports Generated by The Apple Cashier System:

- Sales Slips (invoices);
- Packing Slips;
- Physical Inventory Checklist: inventory listing including stock number, quantity in stock, total price by part number, vendor, and total inventory;
- Turnover Report: analysis of sales rates by item which can be used to determine optimal inventory levels and reorder quantities;
- Back-ordered Items Report: back-ordered parts by customer and by total items on back-order;
- Item Movement Report: tracks changes in inventory levels;
- Inventory Value Report: gives the total carrying cost of each inventory item, as well as totals for accounting purposes.

Daily Transactions allowed are:

- sales processing;
- inquiries into inventory;
- markup;
- expense processing;
- ordering;
- daily totals.
- quotations;
- receiving;

Automatic Report Scheduler:

allows operator to run all management reports at one time.

Transactions that may be completed only by authorized personnel:

- Expense—to expense an item out of inventory and print an expense voucher;
- Ordering—to order from vendors and print purchase order forms;
- Receiving—to update inventory file with the receipt of stock and produce receiving report;
- Markup—to change the sales price field currently stored in the inventory file;
- Totals—to print today's cash and sales totals, and monthly and year-to-date sales totals;
- Maintenance—to create and change customer/vendor and inventory information;
- Store Management.

The Apple Cashier Package Order No. A2D0025

With your Apple Cashier order, you will receive:

- Apple Cashier System Diskette;
- Back-up Apple Cashier System Diskette;
- Two (2) Blank Diskettes;
- Apple Cashier System Instruction Manual;
- Software License Agreement;
- "Hotline" telephone support;
- Three-Ring Binder, a binder holder for two diskettes, and blank labels (18) for data diskettes.

Apple Writer

Text Editing Made Simple

Software

The Apple Writer program turns your Apple II Computer system into a sophisticated text editor—providing you with the capability to write, revise, edit, and print all types of documents quickly and inexpensively. You can easily perform every editing task, from correcting typographical errors to moving whole paragraphs. And you can precisely format and print your text letter-perfect every time.

Benefits

Apple Writer...

- saves time often spent modifying, moving, and formatting text, with its extensive editing and printing commands...
- increases productivity by eliminating retyping because corrections can be made character-by-character, so there's no need to retype an entire line when only minor changes are required...
- is easy to learn and operate with its simplified command structure...
- saves paper costs and filing space with floppy diskette storage...
- reduces paperwork costs with its powerful editing capabilities...
- allows you to write in any order you choose, so text can be stored in sections and later combined in any order for printing...
- protects files from accidental loss through its program/system recovery and audible prompt features.

Apple Writer— A Closer Look

The Apple Writer program diskette contains a Tutorial text file which you can view on your screen. It introduces you to some of the features of the Apple Writer editor, so that you'll feel more comfortable using the program for the first time. Just follow the simple instructions in the Apple Writer program manual to access the Tutorial.

The Apple Writer program is ready to use when the "Editor Menu" is displayed on your monitor or television screen.

By selecting INITIALIZE NEW FILE, for example, and pressing the "return" key, you may begin a new document. Simply enter your text on the Apple's keyboard, and it will be displayed simultaneously on your screen. Although only upper case letters will appear, Apple Writer will automatically translate them into lower case during printing. To capitalize a letter or word, use the "ESC" key; capitals will appear as inverse video on your screen and upper case when printed.

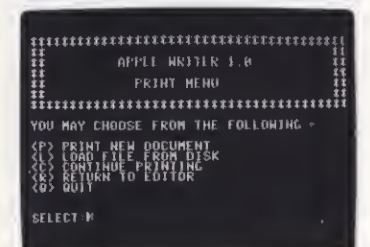
When typing your text, pressing the "return" key is necessary only at the end of paragraphs. Apple Writer will automatically insert all other "returns" during printing. You can type continuously—and faster—since there's no need to press the "return" key at the end of every line.

If you want to insert a new word or sentence within your text, move the cursor to the desired location and begin typing. To delete information, use one of the Apple Writer commands that allow you to edit out by word, sentence, or block of text. Or simply position the cursor after the data to be deleted and backspace.

Apple Writer also provides a powerful automatic or manual "search and replace" feature. If you've misspelled a word throughout the text, for example, enter the misspelled word and its correct spelling. Then type two simple commands, and Apple Writer will change every misspelling of the word instantly. If you've overused a word and wish to change it only in specific locations, enter the word and an appropriate synonym. Apple Writer will lead you through the text, stopping at each occurrence of the word. You can then specify where you wish each substitution to be made.

To format text, just type one of the four commands that center, left-, right-, or fill-justify lines during printing.

With your Apple Computer System connected to a compatible printer, Apple Writer will print your finished documents automatically.



The Apple Writer "Print Menu" will be displayed after you have selected PRINT FILE from your Editor Menu.

To print your document, select PRINT NEW DOCUMENT and press the "Return" key. Apple Writer will then display a listing of printer parameters.

Specify desired line spacing, number of lines per page, page numbering, and margins. Then press the "return" key once more. Apple Writer will print your document exactly as you've specified.

With Apple Writer, a first draft can be the final copy—every time.

System Configuration

To use the Apple Writer program, you will need the following system:

- Apple II or Apple II Plus, with 48K of memory;
- Apple Disk II with controller;
- a video monitor or television;
- a compatible printer*;
- a printer controller card*.

*Note: The Apple Computer System works with several printers and appropriate controller cards, including those specified below:

- Apple Silentype Printer
Card: Silentype Interface Card (supplied with printer)
- Centronics 779
Card: Centronics Printer Interface Card (Apple Product A2B0007, included if printer is purchased from Apple Computer Inc.)
- Printronix
Card: Parallel Interface Card (Apple Product A2B0002)
- Qume Sprint 5, Diablo Hyterm, and NEC Spinwriter 5510R
Card: High Speed Serial Interface Card (Apple Product A2B0005) with P8-02 PROM

Technical Specifications

Language:

Written in machine language, usable with Integer BASIC or Applesoft.

Display:

Up to 24 lines of 40 characters/spaces each. Upper case displayed in inverse video.

Storage:

Up to 31,901 characters per file, 95 pages of text per diskette.

Editing Functions:

Cursor Control—Cursor can be moved up, down, left or right one space at a time; up or down 12 lines at a time; or to beginning or end of text.

Free Memory—Allows user to check amount of memory available.

Disk Access—Allows user to catalog or save files to diskette.

Upper Case Conversion—Allows the user to change up to 15 lines of text into upper case instantly.

Insert/Save—Allows the user to insert a stored file into a new document or save a file segment to the diskette.

Search and Replace—Allows automatic or manual search and replacement of user-specified "strings", including single characters, or words and phrases, parts of words and phrases, sentences, etc., up to a maximum of 76 characters each.

Deletions—Deletes by character, word or paragraph up to 256 characters.

Move Block—Moves block of data within a file.

Printing Functions:

Justify—Allows user to specify centered, or fill-, right-, or left-justified lines of text.

New Page—Allows user to specify when a new page should be started.

Margin Set—Allows user to set top, bottom, left and right margins.

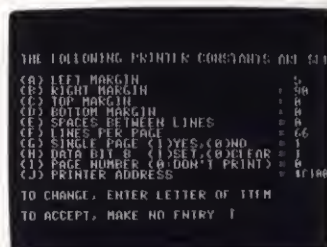
Line Spacing—Allows user to select the number of spaces between lines.

Paper—Provides for continuous fan-fold and single-sheet paper.

Note: Apple Writer does not provide tab, proportional spacing or underscoring capabilities.

The Apple Writer Package Order No. A2D0026

- With your Apple Writer order, you will receive:
- One (1) Write-Protected Apple Writer Diskette
 - One (1) Non-Write Protected Apple Writer Diskette
 - Apple Writer Instruction Manual



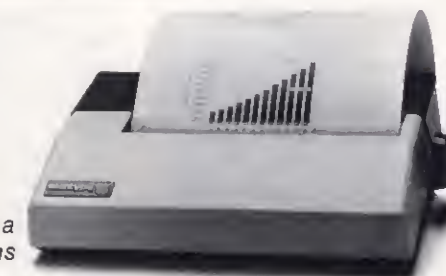
Software

Apple Plot

"Charting" The Way

The Apple Plot program allows you to use your Apple Computer System to create, revise, and print highly detailed charts and graphs quickly and easily. Any information, from sales and stock activities to caloric intake and miles per gallon, can be presented in a visually appealing, comprehensive bar, line or scatter chart.

The program allows you to specify each axis, update and change information, and label the charts exactly as you wish. Graphs can be colored for differentiation and effect. With the Apple Graphics Tablet, you can further customize any graph with a company logo or other marking. Transparencies of finished graphs can be used for presentations; hard copy can be printed for reports and later analysis.



Benefits

Apple Plot...

- helps you understand numerical information by displaying it graphically...
- offers the capability for displaying externally generated data, because it can be used with other data base programs...
- saves countless hours of design and drawing time by producing a finished chart automatically—you need only provide data points and choose the format...
- offers versatility in presenting material, because it provides six graph forms from which to choose...
- allows data to be differentiated on the screen through your Apple's color capability...
- permits design of custom plots because the user controls every graph parameter...
- provides for comparisons because two graphs can be displayed on the same axis, and each graph can contain up to 100 points.

Apple Plot— A Closer Look

It's easy to put Apple Plot to work. The program diskette contains sample data sets to help you learn to create custom plots. Following the step-by-step instructions in the Apple Plot manual, you can "chart" your way, selecting functions from the program's main menu.

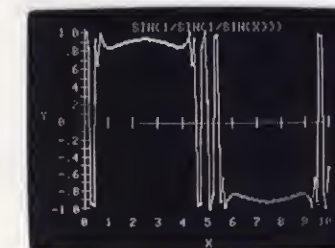
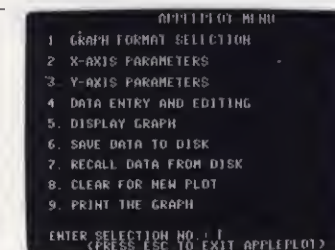
Graph Format Selection—This Apple Plot option offers a choice of six graph formats for plotting up to two separate data sets in a single display. If you're plotting more than two, there is a special overlay capability which allows additional data sets to be placed on the same graph. You can also physically exchange the coordinate data of the two data sets automatically, as well as specify colors.

X-Axis and Y-Axis Parameters—These options let you specify the limits, resolution and labeling of the axes. Apple Plot will ask questions about the data (for example, Is This a Monthly Plot?), display a possible reply (called a "default" reply), and wait for you to either confirm its answer or type in a different one.

Data Entry and Editing—This option is used for entering the number of data points in a graph; specifying where they are to be placed; changing information if necessary; or displaying a list of the data points in the current data set.

Display Graph—This option actually produces the graph on the screen.

Save Data to Disk—There are two forms in which you can save Apple Plot data onto an Apple diskette: Data and Picture. Data saves the data points in both data sets, the selected graph format, and all of the X- and Y-axis parameters. Picture saves the Apple's high-resolution screen image of the most recently displayed graph (especially useful when other graphs have been overlaid).



Recall Data from Disk—Although there are only two ways to store Apple Plot data onto a diskette, there are three in which to recall it: Data, Data (Raw) and Picture. When you recall Data, Apple Plot will display all stored data; when you recall Data (Raw), it will provide only the data points (used for reading data generated by external programs.) Picture recall simply redraws a previously developed high resolution screen image, exactly as it looked when it was saved.

Clear for New Graph—Resets all parameters and data to begin a new graph.

Print the Graph—Provides hard copy printout of graphs when an Apple Silentyte or Qume Sprint 5 is connected to your system.

Additionally, there's a special program on the Apple Plot diskette that allows you to use your stored charts and graphs in a "slide show" on your monitor or television screen. This unique capability is ideal both for reviewing different graphs and for making presentations without the need for hardcopy or other printed visuals.

System Configuration

To use Apple Plot, you will need:

- Apple II (with Applesoft Firmware Card), or Apple II Plus, with 48K of memory; or
- Apple II with Apple Language System;
- One Apple Disk II drive with controller (second drive optional);
- a video monitor or television;
- a compatible printer* (optional);
- a printer controller card* (optional).

*Note: An Apple Computer System using Apple Plot works with the following printers and appropriate controller cards:

- Apple Silentyte Printer
- Card: Silentyte Interface Card (supplied with printer)
- Qume Sprint 5
- Card: High Speed Serial Interface Card (Apple Product A2B0005) with P8-02 PROM.

Technical Specifications

Language: Written in Applesoft BASIC.

Program Status Codes:

Ranging Data—displayed when data has been read in the Raw format.

Check Your Input—displayed, accompanied by three "beeps", whenever Apple Plot encounters an error or inconsistency of any kind when trying to recall data from the diskette.

Clearing—displayed when Apple Plot is resetting all parameters to their original default values.

Default Values:

Graph Format Selection: Standard Graph with Graph Overlay

(bar and scatter plots also available)

Overlay Additional Graphs: OFF

Color for Plot 1: White Color for Plot 2: Blue

X-Axis Parameters:

Monthly Plot: No	Number of Divisions: 10	Use Label #2: No
First Month: 1	Maximum X-Axis Value: 1	Change Label #2: No
Number of months: 12	Minimum X-Axis Value: 0	Text for Label #2: (blank)
Yearly Plot: No	X-Axis Label: X	Extended Vertical Grid Lines: No
Number of first year: '80	Use Label #1: No	
Number of last year: '90	Change Label #1: No	
	Text for Label #1: (blank)	

Y-Axis Parameters:

Number of Divisions: 10	Y-Axis Label: Y
Maximum Y-Value: 1	Title of Graph: Unformatted Graph
Minimum Y-Value: 0	Extended Horizontal Grid Lines: No

Data Entry and Editing:

Number of data points:	Data Entry:
Starting point for plot 1: 0	All data points, X-value: 0
Ending point for plot 1: 0	All data points, Y-value: 0
Starting point for plot 2: 0	
Ending point for plot 2: 0	

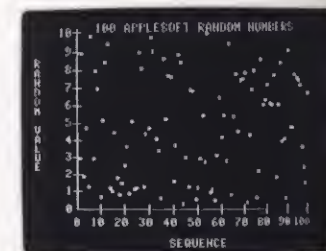
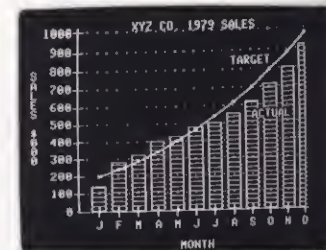
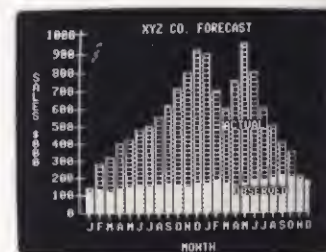
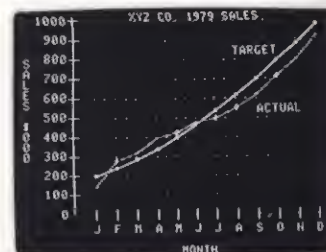
Display Graph:

Location of label 1
(before positioning): upper left-hand corner
Location of label 2
(before positioning): upper left-hand corner

The Apple Plot Package
Order No. A2D0033

With your Apple Plot order, you will receive:

- One (1) Write-Protected Apple Plot diskette
- Apple Plot Instruction Manual



Software

Apple Post

Mailing List Maintenance the Apple Way

Benefits

Apple Post is a mailing list system designed for your Apple II that allows you to enter, edit and store names, addresses and telephone numbers. When your Apple Computer System is attached to a compatible printer, Apple Post will also print mailing labels, address and telephone lists, and your personal zip code directory.

Apple Post...

- allows small businesses to take advantage of direct mail to customers, because it uses the power of the Apple computer to maintain customer lists and print mailing labels...
- locates names that you wish to modify or which may have been misspelled during data entry, through its phonetic search routines...
- provides you with the capability to perform demographic mailings quickly and easily, because it will print addresses by specified zip codes or other identifiers through its special search routines...
- offers you the option of printing complete or specified portions of any list for your review or files through its select routine...
- automatically prints mailing labels of completed or selected mailing lists through its labels routine.

Apple Post—A Closer Look

An Apple Post list will hold approximately 500 name and address records on a single diskette, for use with a two-drive system. A maximum of 2,590 records, or five full diskettes, may be kept online at the same time with a six-drive system. If you are going to be creating large lists, consider the possibility of breaking them up into smaller lists. For example, a subscription list for a monthly magazine could be broken into one list for the subscriptions that would expire in January, a second for those that would expire in February, etc. This would allow Apple Post to handle over 30,000 subscriptions with six drives, or 6,000 with two drives.

Learning the function of each Apple Post command is all it takes to begin using the Apple Post system. These commands appear in the VALID COMMAND LIST at the beginning of the program. A few are detailed here to give you a feeling for the program.

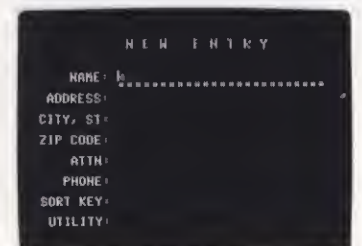
EXPLAIN may be used to display a brief three-line summary of any listed command in the system. It's especially helpful if you forget what a certain command will do.

The ENTER command permits you to add new entries to the Apple Post name and address list. After selecting this command, your screen will display the NEW ENTRY preformatted screen.

Most of the entries are self-explanatory. The ATTENTION line is a free line of 20 characters. It is printed before the name line on a mailing label. If the name line contains the name of a company, for example, the attention line could contain the name of an individual or department within the company.

The SORT KEY is the line used by the Apple Post system to decide where on the diskette to file the entry. All entries are stored in alphabetical order by sort key. The sort key line cannot be empty. When a name and address is first entered, a default reply (for example, the person's last name) will appear on the sort key line. If you wish to change the sort key, type the new entry and the default reply will disappear as you type over it.

To "flag" or identify some names as belonging to special groups, Apple Post provides the UTILITY line. It will be referenced when you use the SELECT command to specify a group or groups for which you need to print a listing or mailing labels.



The EDIT command allows you to modify any line of a name and address record, except for the sort key line, or delete the entire entry.

If you are trying to locate a certain name and you're not sure of the way you spelled it during entry, you will use the FIND command. The spelling and spacing of the name need not be identical to what was entered; the Apple Post system will search for any entries that are phonetically similar to the one you have specified.

The ZIPFIND command selects name and address records by Zip Code and permits you to modify any line of the names and addresses in the list.

The Apple Post manual explains each command in detail.

System Configuration

To use Apple Post, you will need:

- Apple II (with Applesoft Firmware Card), or Apple II Plus, with a minimum of 32K memory; or
- Apple II or Apple II Plus, with the Apple Language System;
- Two (2) Apple Disk II drives, one with controller;
- a compatible printer* (optional);
- a printer controller card* (optional);

*Note: The Apple Computer System works with several printers and appropriate controller cards, including those specified below:

- Centronics
Card: Centronics Printer Interface Card (Apple Product A2B0007)
- Printronix
Card: Parallel Interface Card (Apple Product A2B0002)
- Qume Sprint 5, Diablo Hyterm, and NEC Spinwriter 5510R
Card: High Speed Serial Interface Card (Apple Product A2B0005) with P8-02 PROM

Technical Specifications

Language:

Written in Applesoft BASIC

Function:

Mailing List Maintenance

Maximum Size of an Online List:

2590 names

Field Sizes:

Name	25 characters
Street Address	25 characters
City & State	20 characters
Zip Code	9 characters
Attention Line	20 characters
Telephone Number	12 characters
Sort Key	10 characters
Utility Field	10 characters

Record Sizes:

Name & Address Files	155 bytes
Soundex Index File	17 bytes
Zip Code Index File	17 bytes

Disk Drive Requirements

1 to 500 Names	2 drives
501 to 1000 Names	3 drives
1051 to 1570 Names	4 drives
1571 to 2105 Names	5 drives
2106 to 2590 Names	6 drives

The Apple Post Package Order No. A2D0013

With your Apple Post order, you will receive:

- One (1) Apple Post Diskware™ diskette;
- Apple Post Mailing List System Manual.

Dow Jones Series Portfolio Evaluator

The Stockmarket at Your Fingertips

Software

The Apple Portfolio Evaluator program allows you to store, modify, and update approximately 100 individual portfolios of up to 50 stocks each on a single diskette. Additionally, by connecting your Apple Computer System to a telephone, the Portfolio Evaluator program permits you to access quotes for more than 6,000 companies using the Dow Jones News Retrieval System.

The Apple Portfolio Evaluator is a convenient, time saving way to keep your finger on the pulse of the stockmarket.

Benefits

The Portfolio Evaluator...

- saves time usually spent obtaining quotes from a broker by giving you access to information about stocks, preferred stocks, and warrants listed by Dow Jones...
- eliminates the need for time-consuming math, because it instantly tabulates the current value—gains or losses—of each portfolio, and displays it on the screen or on paper via a printer...
- increases your efficiency, because it automatically catalogs the portfolios by name and displays the complete catalog for your review upon command.

Portfolio Evaluator— A Closer Look

The main menu of the Portfolio Evaluator contains three program options.

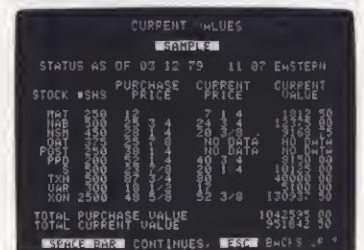
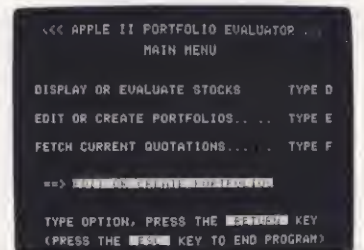
To create a portfolio, select EDIT. The edit module will be loaded from the diskette, and the Portfolio Evaluator program will lead you through the data entry process step-by-step. Preformatted screens assist you in entering stock symbol, number of shares, purchase date, and purchase price for each stock in a portfolio.

Perhaps the most exciting aspect of the Portfolio Evaluator is its ability to let you "log on" to the Dow Jones News/Retrieval Service. With your password (which will be given to you by your dealer when you sign the Dow Jones Stock Quote Reporter Agreement), you will be able to access the Dow Jones computer and "fetch" current quotes in real time. (To conform with Federal regulations, stock quotations are delayed 15 minutes.) You'll need a working telephone, a modem, and a special interface to take advantage of this part of the program. (See System Configuration.)

To access Dow Jones, select FETCH CURRENT QUOTATIONS from the main menu; the "log on" module will be loaded into your Apple. Once again, the Portfolio Evaluator will lead you through this part of the program step-by-step. You'll be instructed to dial a Dow Jones telephone number (local, in most cases) and insert your telephone receiver into the modem. After you have satisfied the Dow Jones computer with an acceptable password, you'll be able to update every quote in every portfolio on your diskette.

You can review a revised portfolio simply by choosing DISPLAY OR EVALUATE STOCKS from the main menu. The display module will be loaded from the diskette, and you will be asked for the name of the portfolio you wish to review. Type the name and press the "return" key. If you've forgotten the name of the portfolio, simply type a question mark (?) and press the "return" key to view the diskette catalog.

After identifying the desired portfolio from the catalog, press the space bar and enter its name. "Searching for portfolio" will appear on your screen. In a few seconds, you will be presented with a list of four options.



The first three options listed allow you to obtain previously-stored information within the specific portfolio; the fourth option—Printer On/Off—allows you to print that information.

System Configuration

To use the Portfolio Evaluator Program, you will need:

- Apple II (with Applesoft Firmware card), or Apple II Plus, with minimum 32K of memory; or
- Apple II with the Apple Language System;
- Apple Disk II with controller;
- Apple Modem IIB (supplied with Apple Communications Interface Card);
- a video monitor or television;
- a standard, working telephone;
- a compatible printer*;
- a printer controller card*;
- "password" for the Dow Jones News Retrieval Service

*Note: The Apple Computer System works with several printers and appropriate controller cards, including the following:

- Apple Silentype Printer
- Card: Silentype Interface Card (supplied with printer)
- Centronics
- Card: Centronics 779 Printer Interface Card (Apple Product A2B007, included if printer is purchased from Apple Computer Co.)
- Printronix
- Card: Parallel Interface Card (Apple Product A2B0002)
- Qume Sprint 5, Diablo Hyterm, and NEC Spinwriter 5510R
- Card: High Speed Serial Interface Card (Apple Product A2B0005) with P8-02 PROM

Technical Specifications

Storage:
Up to 50 stocks in a single portfolio; 100 portfolios of 50 stocks each on a single diskette.

Language:
Written in Applesoft BASIC.

Dow Jones Access:
15-minute tape delay; exchanges include NYSE, AMEX, and OTC NASDAQ.

Note: The cost of the Portfolio Evaluator package includes the one-time password fee necessary to use the Dow Jones News Retrieval System. There are additional connect-time charges, as per the existing Dow Jones rate schedule. Your dealer can explain these to you.

The Portfolio Evaluator Package Order No. A2D0007

With your Portfolio Evaluator order, you will receive:

- Apple Portfolio Evaluator diskette;
- Apple Portfolio Evaluator Instruction Manual;
- Dow Jones News/Retrieval Directory;
- Dow Jones Stock Quote Reporter contract.

Software

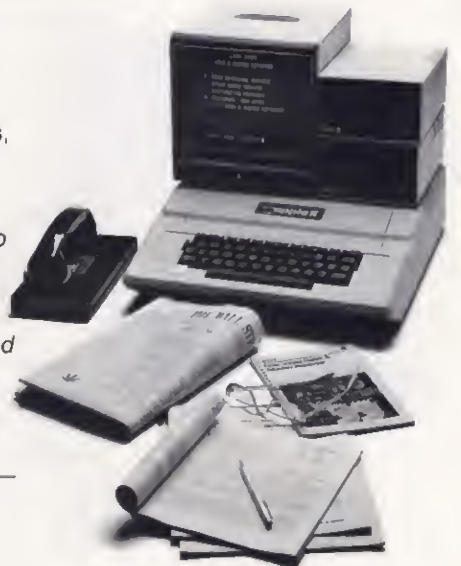
Dow Jones News & Quotes Reporter

Selected Business News at the Touch of a Key

The Dow Jones News & Quotes Reporter is a powerful business software package, designed especially for investors, busy managers, and executives who need fast access to stock market news and information. It allows users to retrieve—over telephone lines—past and current news stories and headlines from the Dow Jones News/Retrieval Service, The Wall Street Journal, and Barron's, as well as quotations for more than 6,000 companies traded on the major exchanges.

News & Quotes Reporter can also be used in conjunction with Portfolio Evaluator, another Dow Jones program from Apple. Portfolio Evaluator allows you to store, modify, and update approximately 100 individual portfolios of up to 50 stocks each on a single diskette. This capability—coupled with News & Quotes Reporter's access to late-breaking financial news and stock quotations—provides the tools and information needed for sophisticated portfolio creation and management.

The Dow Jones News & Quotes Reporter is your personal key to making sound investment decisions in a rapidly changing world.



Benefits

The Dow Jones News & Quotes Reporter package...

- saves time spent skimming and searching through business media, by putting financial headlines and news stories at your fingertips...
- keeps you informed of stock price fluctuations, by providing fast access to stock quotations for more than 6,000 companies listed on the major stock exchanges...
- renders concise records for business or tax purposes through a monthly Dow Jones billing.

Dow Jones News & Quotes Reporter —A Closer Look

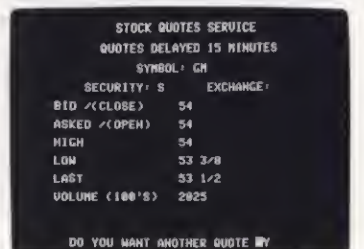
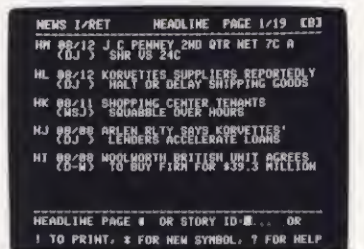
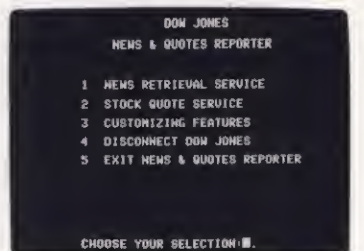
The main menu of the Dow Jones News & Quotes Reporter contains five program selections.

You can access, display, and print news headlines and entire stories from the worldwide network of the Dow Jones News/Retrieval Service, *The Wall Street Journal*, and *Barron's*. You can also access timely stock and composite quotes on corporate stocks and bonds, options, mutual funds, and treasury notes and bonds on the New York, the American, the Mid West, and the Pacific Stock Exchanges, plus the Over-the-Counter market (OTC NASDAQ).

You can "log on" to the Dow Jones News/Retrieval Service over telephone lines, using either an autodial or acoustic modem and a special password. (The password is obtained from your dealer at the time you purchase the program.) To access news items, select NEWS RETRIEVAL SERVICE from the main menu. Your Apple II System automatically initiates the log-on procedure, even automatically dialing the correct phone number if you have an autodial modem.

You can obtain news either by category or company. For example, you may be interested in up-to-the-minute foreign news—say, from the Mid-East—or in current stories concerning aerospace, mining, or a particular company. Using NEWS RETRIEVAL SERVICE, simply enter the appropriate symbol. Then choose the most recent news story, or the first page of subject-related headlines. There may be less than a page or many pages of headlines, listing some stories as far back as three months.

Using one of several suggested printers (see System Configuration), you can also print news stories in their entirety, or the full list of headlines (one page at a time). Simply type the "!" symbol, and the news item or list of headlines that you're reading on the video



monitor will be printed.

Another selection option available from the main menu is STOCK QUOTE SERVICE, which allows you to access Dow Jones' securities quote data base and obtain current stock quotations. (To conform with the various exchange regulations, stock quotations are delayed at least 15 minutes.) As it does with NEWS RETRIEVAL SERVICE, News & Quotes Reporter leads you step-by-step through the STOCK QUOTE SERVICE procedures.

The third option on News & Quotes Reporter's main menu, CUSTOMIZING FEATURES, allows you to print news stories either at 40 or 80 characters wide. You can switch easily from 80-character/line hardcopy for news stories, to 40-character/line hardcopy for the Dow Jones Industrial Averages. CUSTOMIZING FEATURES also lets you enter and maintain your password (supplied by Dow Jones), and enter and maintain two telephone numbers for use with an autodial modem.

Selection 4, DISCONNECT DOW JONES, simply disconnects your line from the Dow Jones phone number. With this option, you "hang up" and don't continue paying connect-time charges, but your system is left still running, connected, and ready to log back on, as soon as you need News & Quotes Reporter again. Selection 5, EXIT NEWS & QUOTES REPORTER, terminates the News & Quotes Reporter program.

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NEWS 1/FIN  STORY TT  PAGE 1
08/12 TREASURY TO SELL $4.5 BILLION
(DJ) OF 2-YEAR NOTES
MASHW -DJ- THE TREASURY PLANS TO
RAISE $1.53 BILLION IN FRESH CASH ON AUG
28 BY SELLING $4.5 BILLION OF TWO-YEAR
NOTES TO REFUND $2.98 BILLION OF NOTES
MATURING AT THE END OF AUGUST.
TENDERS FOR THE NOTES AVAILABLE IN
MINIMUM DENOMINATIONS OF $5 000 MUST BE
PRESS: <-> FOR PACING  ? FOR HELP
1 TO PRINT STORY OR N FOR HEADLINE

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System Configuration

To use the Dow Jones News & Quotes Reporter you will need:

- Apple II or Apple II Plus, a minimum 48K of memory;
- Apple Disk II with controller and 16-sector PROMs;
- Apple Modem IIB, with Apple Communications Interface Card;
- a video monitor or television;
- a standard, working telephone;
- a printer and interface card* (optional);

*Note: The Apple Computer System works with several printers and appropriate interface cards, including the following:

- Apple Silentyte Printer
- Card: Silentyte Interface Card (supplied with printer)
- Printer IIA (Centronics)
- Card: Centronics 779 Printer Interface Card (Apple Product A2B0007, included if printer is purchased from Apple Computer Inc.)
- Qume 5/45
- Card: High Speed Serial Interface Card (Apple Product A2B0005) with P8-02 PROM

Technical Specifications

Language:

Written in Pascal (Run only—Language System not required).

Dow Jones Access:

Minimum 15-minute tape delay; exchanges include NYSE, AMEX, Mid-West, Pacific, Composite, and OTC NASDAQ.

Note: The cost of the Dow Jones News & Quotes Reporter package includes the one-time password fee necessary to use the Dow Jones News/Retrieval Service. In addition, there are also Dow Jones connect-time charges. If you already own Apple's Portfolio Evaluator program, then you've paid for and received a password that's usable with News & Quotes Reporter. Though you have to pay the password fee again as part of the News & Quotes Reporter package, the amount will be credited to your account, toward non-prime connect time. Your dealer can further explain these arrangements to you.

The Dow Jones News & Quotes Reporter Package Order No. A2D0030

With your News & Quotes Reporter order, you will receive:

- Apple's Dow Jones News & Quotes Reporter master diskette;
- Apple's Dow Jones News & Quotes Reporter back-up diskette;
- Apple's Dow Jones News & Quotes Reporter Instruction Manual;
- Dow Jones News/Retrieval and Stock Symbol Guide;
- Dow Jones News/Retrieval Service contract and password;
- One hour of free, introductory connect time, to be used during non-prime time hours, within 15 days of purchase of the News & Quotes Reporter package. (Your dealer can tell you the non-prime time hours in your area.)

Software

Tax Planner

The Personal Financial Planning Tool

Tax Planner—an innovative program designed for use with Apple II and II Plus computers—allows you to determine the federal income tax advantages or liabilities that result from personal financial decisions. It provides you with the capability to construct various income scenarios, and then compare the federal income tax impact of each. Additionally, Tax Planner instantly computes the financial consequences of income-affecting decisions for up to nine years in the future. This means you can determine the best time to make a financial move (for example, sell property or take losses on investments). And you can print out your tax strategies, or store them on diskettes, ready for fast retrieval and modification.

Tax Planner—the tool that can help you better manage your personal income and the tax mechanisms that affect it.



Benefits

Tax Planner...

- provides you with the capability to optimize the federal income tax advantages available to you, because it lets you quickly compare the tax consequences of various financial decisions...
- assists you in choosing the best time to make certain financial moves, by instantly computing their impact on income taxes in current and future years...
- helps clarify current federal tax regulations, because you can experiment with various financial scenarios and observe how tax mechanisms apply to each...
- increases your productivity, by allowing you to quickly develop or change tax strategies.

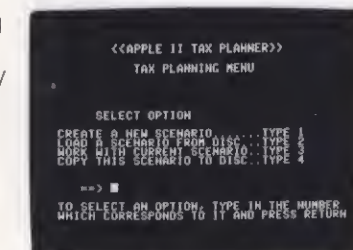
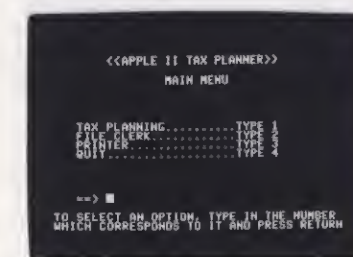
Tax Planner—A Closer Look

Tax Planner's main menu consists of four options. To begin using the program, select TAX PLANNING. Before tax computations can be performed, you will be asked to provide some information, including how far into the future you wish to plan (up to nine years), and your taxable income for each of the four preceding years. If you choose to plan only for next year, you may specify the number of alternative scenarios to be examined for that year. After you've provided this information, your screen will display the Tax Matrix, a skeletal list of items which affect your federal income tax situation. These include your tax filing status, long- and short-term capital gains, income, deductions, and adjustments.

Suppose your base year is 1980 and you wish to do some planning for 1981 and 1982. On the screen, the matrix will display three columns labeled 1980, 1981, and 1982. Tax Planner will automatically compute your adjusted gross income, your estimated tax, and your tax bracket, once you've filled in the information above "ADJ GROSS INC."

Setting up your matrix usually requires some time and careful thought. But once it's complete, Tax Planner does all the rest of the work—the tedious tax calculations—for you. To compute your adjusted gross income, taxable income, taxes, and other figures, just press the "C" (for "compute") key. Tax Planner automatically computes your tax by income averaging as well as by the regular method. It also computes the maximum tax on personal service income, the minimum tax on preference items, and the alternative minimum tax. In addition, your tax bracket and the tax computation method most advantageous to you are determined for each year or financial scenario.

You can create a matrix with as many as nine columns, each containing alternative sets of tax data for a single year. Although the screen displays only three columns at a time, up to nine can be stored



within any single scenario. (The above example, for instance, could have included up to six additional years—in all, a tax strategy for 1980 through 1988.) The additional columns are moved, or "scrolled," on and off the screen, simply by pressing the left or right cursor movement keys.

With Tax Planner, you can use a matrix to quickly perform "what if" experiments that otherwise would consume hours of tedious calculations. Suppose, for instance, that you're thinking about selling your home, and you wonder if it would be more advantageous in tax savings to sell it this year rather than next. Simply include the expected sale price in this and next year's cell, letting Tax Planner compute the results in each case. A quick comparison will reveal the more advantageous timing for the sale.

Once you've developed a tax scenario you want to keep, save it on your diskette by selecting FILE CLERK from the main menu, and following the step-by-step instructions displayed on your monitor. Or choose the PRINTER option to set your printing parameters and print out the strategy.

Because Tax Planner incorporates the current federal tax laws, you can be assured of the validity of its computational results. In addition, if you fill out and mail the user registration card that accompanies the program, Apple Computer Inc. will keep you informed of any product changes corresponding to tax law revisions.

Whether you're a financial advisor who wants to bring the latest technology to bear on your client's tax situations, or an individual with substantial opportunities for advantageous tax treatment of income, you'll find that Tax Planner will become an indispensable tool for quickly generating dollar-saving financial strategies.

System Configuration

To use the Tax Planner, you will need:

- Apple II or Apple II Plus, with a minimum 48K of memory;
- Apple Disk II with controller and 16-sector PROMs;
- video monitor or television;
- printer and interface card* (optional);

*Note: Apple Computer systems work with several printers and appropriate interface cards, including the following:

- Apple Silentype Printer
- Card: Silentype Interface Card (supplied with printer)
- Qume Sprint 5/45
- Card: High Speed Serial Interface Card (Apple Product A2B0005)
- Printer IIA (Centronics)

Card: Centronics 779 Printer Interface Card (Apple Product A2B0007, included if printer is purchased from Apple Computer Inc.)

Technical Specifications

Language:

Written in Pascal (Run only—Language System not required).

Control Keys:

Cursor Movement

Up: I
Down: M
Left: J
Right: K
Cell to Cell: RETURN (across, then down)
Within a Cell: <—(to "back-out" of an incorrect data entry)

Data Entry

Digits: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 (dollars only)
Duplicate: D (duplicates value for same line item in next cell within a row)
Fill: F (duplicates value for same line item in all cells within a row)

Command

Help: ?
Compute Taxes: C
Main Menu Return: ESC

The Apple Tax Planner Package Order No. A2D0040

With your Tax Planner order, you will receive:

- Two (2) Tax Planner diskettes (master and back-up);
- Instruction manual;
- Customer license agreement;
- User registration card.

VisiCalc™ III

The Electronic Worksheet

Software

VisiCalc III is a powerful new version of the award-winning VisiCalc software, designed especially for use with the Apple III computer system. It virtually eliminates calculator, paper, and pencil in developing plans and analyzing results. Any problem you might wish to tackle using rows and columns can be solved quickly—and accurately—with VisiCalc III. You can create your own models or use an existing one from the VisiCalc III library of "tool kits." General purpose business, real estate, and financial models are already available, with more planned for the future.

Managers can use VisiCalc III to plan budgets, create forecasts, and develop pricing strategies. Financial professionals can prepare statements, compute ratios, and modify projections. Scientists and engineers can study causes, effects, and tradeoffs—all in seconds, instead of hours or days.

One of the most innovative and versatile planning tools ever designed, VisiCalc III is a powerful productivity tool for every manager and professional.



Benefits

VisiCalc III...

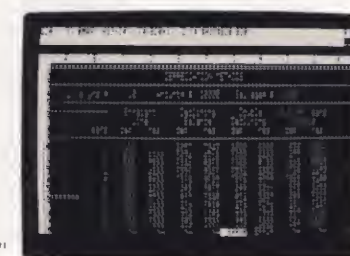
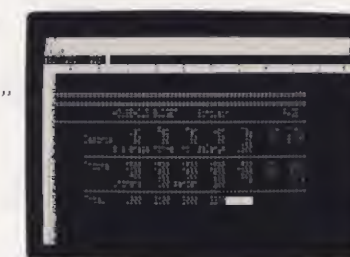
- increases personal productivity, because of its flexibility, ease of use, and high-speed computation...
- can be put to work immediately, because it allows you to write and use complex "programs" without learning a programming language...
- speeds data manipulation through an extensive, built-in library of financial, statistical, and scientific functions...
- expands the effective workspace of your monitor screen, because the Apple III's four cursor control keys allow rapid display of any portion of a large spread sheet...
- simplifies data checking and comparison through its "split-screen" capability, which allows you to display, move, and modify widely separated entries side by side...
- eliminates trial-and-error columnar formatting of documents, because its display—with 80 upper and lower case characters per line—prints exactly as it appears on the screen...
- increases your data handling capabilities, because the Apple III's large, 65K-byte user memory space allows you to construct and work with very large models...
- enhances the appearance of your reports, because you can title rows and columns—and vary the numeric and graphic format—to produce the look you want.

VisiCalc III— A Closer Look

To use VisiCalc III, simply insert the program diskette into the Apple III disk drive and "boot" the system. On your monitor screen you'll see an electronic worksheet—resembling a columnar pad—of up to 63 columns and 254 rows. At the juncture of any column and row, you can type in words, numbers, or formulas.

Your monitor screen is a "window" which allows you to view a section of the entire VisiCalc III worksheet. The window can be moved, or "scrolled," in all four directions for viewing every section. Or you can split the screen into two "windows," so that you can compare pieces of data that are in different places on your worksheet. You can even synchronize "windows" so that they move together, always keeping particular lines or columns of data next to one another.

VisiCalc III's cursor is a reverse-field strip, or "box," one column wide (you set the width you need) and one row deep. When "filling in"



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the worksheet, the new values and words you enter are displayed within this box as you type them.

By using either the Apple III's arrow keys, or the "GO TO" capability of VisiCalc III, you can quickly move the cell cursor to any area of the worksheet. Visible at any given time are 20 rows of data; the number of columns you can see depends on the column width you've designated. Typically, you will see at least eight columns—the same number that would fit on an 8½ inch sheet of paper.

Entering or changing values and words on the worksheet is quite straightforward. First, position the box cursor to the place where you want the data to appear (or where you wish to change data already entered). Then simply enter the new numbers or words.

Titles and column headings can be written anywhere on the worksheet. When placed either along the top or down the left-hand side, you can "lock" them into place. Once locked, the title or column heading will "follow" and identify the data associated with it, even when you move to the furthest row or column position. And you can easily unlock titles whenever you want.

When you enter a formula, it will be displayed on the top row of the screen. If you change it at some point, the new values that result will be calculated and displayed instantly on the worksheet.

Formulas can be as simple or as complex as you like. For instance, VisiCalc III can add, subtract, multiply, or divide values located anywhere on the screen—even those values derived by other formulas. A built-in function library conveniently provides many financial, scientific, statistical, and mathematical functions—including net present value, average value and transcendental functions. The result of any calculation is displayed instantly on your screen.

In addition, a replication capability allows you to repeat a formula automatically many times, with different variables substituted. For example, the formula you use to compute January's profit can be replicated to compute profits by month from February through December as well. VisiCalc III's replication feature automatically substitutes the appropriate data elements for each month.

Because VisiCalc III performs complex calculations instantly, you can play "What if...?" as often as you like to solve thousands of different problems. For example, imagine that you've created a business forecast model that takes your gross profit, cost, and net income into account. Sometime later, you begin to wonder what the impact would be if your vendors decided to raise finance charges by 2%. With a few keystrokes, you can update your forecast based on this new assumption, and VisiCalc III will perform the calculations and display the new results instantly for your review.

Another useful feature of VisiCalc III is its "Insert and Delete" editing capability. Using Insert and Delete you can add or delete entire rows or columns in your worksheet model. For instance, suppose you suddenly see that the forecast or plan you're working on is more complex than had been originally thought, and you wish to add more elements to your model. VisiCalc III's Insert and Delete feature allows you to add them painlessly, without having to redesign the entire worksheet. Similarly, you can move entire rows or columns to rearrange pieces of data in your model. VisiCalc III automatically keeps all formulas updated, as you move pieces of your worksheet around.

VisiCalc III lets you quickly save entire worksheets as files on diskettes—including the data, formats, and location on the worksheet where the cursor was last positioned. VisiCalc III data can also be saved by itself, without the worksheet, to be graphed or plotted by other Apple III programs.

Any printer that works with the Apple III can be used to produce a hard copy of your VisiCalc III worksheet. You can print entire worksheets, or—by specifying column letters and row numbers—only selected parts of the data.

If your job frequently involves organizing and manipulating data to prepare budgets, schedules, forecasts, or tables of information,



VisiCalc III can significantly increase your productivity and improve the overall quality of your planning.

System Configuration

To use VisiCalc III, you will need:

- the Apple III Information Analyst System (Option A, B, or C); OR...
- any Apple III;
- Apple III Monitor;
- Silentype or letter-quality printer (optional).

Technical Specifications

Worksheet size:

63 columns by 254 rows.

Available Worksheet Memory:

Approximately 65K bytes available storage on 128K byte Apple III.

Commands:

Blank Entry	Print Portion of Screen
Clear Sheet	Replicate Formula
Delete Row or Column	Load or Save Worksheet
Format an Entry	Initialize Disk
Set Global Format or Option	Delete Saved Worksheet
Insert Row or Column	Set Title Area
Move Row or Column	Split Screen

Functions:

Go To	Net Present Value
Delete Entry	Table Look-Up
Backspace Entry	Pi
Move To Other Window	Absolute Value
On Split Screen	
Add	Greatest Integer
Subtract	Exponent
Multiply	Square Root
Divide	Natural Log
Raise To Power	Base 10 Log
Sum	Sine
Min	Cosine
Max	Tangent
Count	Arc Sine
Average	Arc Cosine
	Arc Tangent

The VisiCalc III Package (If purchased separately from the Information Analyst System) Order No. A3D0002

With your VisiCalc III order, you will receive:

- VisiCalc III diskette;
- VisiCalc III manual;
- VisiCalc III reference card;
- VisiCalc Toolkit Sampler Diskette (pre-written VisiCalc worksheets to help you get started);
- VisiCalc III Toolkit Sampler manual.

Mail List Manager

Professional Mail Lists And Labels At Your Fingertips

Software

Apple's Mail List Manager program for the Apple III automates the tedious, time-consuming tasks of generating and maintaining the address and telephone listings of your customers, colleagues, prospects, and personal acquaintances. Designed for professional performance and ease of use, the program stores, sorts, edits, and prints mailing labels and phone lists in their entirety, or selectively by ZIP code, name, or special user-defined key.

Each Mail List Manager entry may contain up to five lines of information—enough to include a name, address, company name, and business phone number. As many as 916 entries can be stored on a single diskette, and any number of entries and diskettes may be merged to create a single, large mailing list.

Fast and sophisticated sorting is routine with Mail List Manager. You can sort mailing labels by name or ZIP code, and an entire diskette can be sorted in less than two minutes. You can even merge subsets of sorted lists to create new lists—for example, names from A to G only. And you can print letter-perfect mailing labels quickly and efficiently, too, saving hours of repetitive typing time.

If you're looking for a more convenient, flexible way to keep important names, addresses, and telephone numbers organized and at your fingertips, Apple's Mail List Manager for the Apple III is the ideal solution.



Benefits

Mail List Manager...

- increases mailing list efficiency, because it stores, sorts, edits, and prints out labels at the touch of a few keys...
- requires no special training to use, because its menu and forms entry displays are simple and self-explanatory...
- increases your postal communications control, because it lets you sort and print mailing labels by name or ZIP code...
- speeds sorting, because a single diskette (holding information for up to 916 labels) can be sorted completely in only 90 seconds...
- extends your system flexibility, because its unique, user-assignable ID codes let you set up your own custom label selection without any programming.

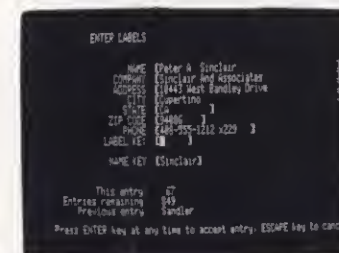
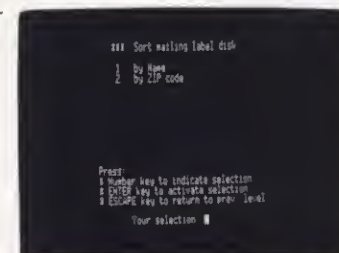
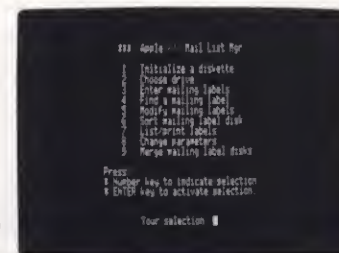
Mail List Manager— A Closer Look

After inserting the Mail List Manager program diskette into your disk drive and booting your Apple III system, your screen will display a title page, followed by the program's main menu. Two of the menu's options must be used before you can begin to create your mailing or telephone lists.

INITIALIZE A DISK. The Mail List Manager program diskette helps you create the lists you need, but is not intended for storage of those lists. You must prepare a blank, formatted diskette for that purpose. Select INITIALIZE A DISK from the main menu. On the screen, you'll see a display that explains, step-by-step, how to create the storage diskette.

CHOOSE DRIVE. Mail List Manager can be used with either a single or multiple disk drive system. (Note: To merge lists, a multiple drive system is required.) Once you have prepared a storage diskette, you must select the CHOOSE DRIVE option to identify the drive you'll be using to store your lists. This step is necessary whether you're using just one drive or several.

With your drive chosen, you're now ready to start creating lists. Menu option 3, ENTER MAILING LABELS, lets you simply "fill in" a form—the mailing label outline—item by item. Individual labels have



ample space for a person's name, company, address, city, state, ZIP code, and telephone number (including extension, if any). There are, in addition, two special line items, Name Key and Label Key, which can be extremely useful.

The Name Key is an eight-character name code under which each label is filed for sorting purposes. Mail List Manager automatically inserts the Name Key for you. For example, if the label is for John P. Jones, the program will insert "Jones" on the Name Key line. You have the option, of course, to change the Name Key if you wish. Suppose, for example, you want a list sorted by company names instead of individuals' names. You can change the Name Key from "Jones" to "XYZ Corp," for example, without changing the way the label will look when it's printed.

The Mail List Manager program recognizes that appellations such as "Jr." or "III" are not last names, even though they sometimes occur at the end of persons' names. In other words, if you're entering a label for John P. Jones III, the program will display "Jones," not "III," on the Name Key line.

The Label Key, six-characters in length, can be used to print sublists from a primary list. Suppose you have a large list of mailing labels, and you want to keep your customers separate from your suppliers. Simply type "cust" (or some other identifier) on the Label Key line for customers, and "supp" for suppliers. Later, you can instruct Mail List Manager to print separate mailing label lists by "cust" or "supp." You can fine-tune your mailing lists as much as you want, saving yourself time, postage, and perhaps even embarrassment!

Mail List Manager also provides a tab replication feature. When you're entering labels, pressing the TAB key on your Apple III moves the cursor to the next space in the label outline. There, the entry used for that item on the preceding label is displayed, and can be instantly replicated on your new label simply by tabbing again. This feature is especially helpful when creating a number of labels for persons in the same company, city, state, or ZIP code area.

After you've created a mailing list, you can make use of the remaining items on Mail List Manager's main menu. To locate a specific name on your list, select FIND A MAILING LABEL and enter (1) the exact name, or (2) a name phonetically similar to the one you're seeking, or (3) the particular sort order for that name (for example, all labels for names beginning with "Z"). Your screen will display a "window" through which you can view the label(s) you requested, plus the labels immediately preceding and following it. And the up and down arrow keys on your Apple III keyboard let you "scroll" your entire label list if you wish—that is, roll it forward or backward onto the screen.

To revise any information on a mailing label after locating it, select MODIFY MAILING LABELS from the program's main menu. Position the cursor on the line(s) to be changed and type the new information over the old. It's that easy.

Once you've made your revisions to the mailing list, select SORT MAILING LABEL DISK to sort your mailing labels, either alphabetically (by Name Key) or geographically (by ZIP code).

Set your printing parameters and specify the Label Key (if any) by choosing CHANGE PARAMETERS on the main menu. To print lists or labels, select LIST/PRINT LABELS. You can print all or part of a list, or only the names and phone numbers. Or you can display or review your entire label list—as it would appear if printed—on your monitor screen.

Mailing List Manager's last menu option, MERGE MAILING LABEL DISKS, allows you to merge separate lists together into one comprehensive list. In this way you can generate and print large numbers of mailing labels that span individual diskettes.

A second and third disk drive are necessary to take advantage of the powerful merge feature of Mail List Manager. Merging two lists on a three-drive system, (when each list fills a diskette), takes approximately 8-15 minutes. A list nearly filling nine diskettes (over 8000 names) takes slightly over an hour with a four drive system.

The Apple III Mail List Manager is a sophisticated mail list management program that gives you the kind of versatility and capacity you need to generate professional mailing labels for billing, direct mail, correspondence, or any other uses dictated by your business needs.

System Configuration	To use the Apple III Mail List Manager for mail lists of 916 labels or less, you will need: ■ an Apple III system with 128K bytes RAM. To use the Apple III Mail List Manager for mail lists that span volumes (i.e., those greater than 916 labels in length), you will need: ■ an Apple III system with 128K bytes RAM; ■ two expansion disk drives (Disk IIs for Apple III).	
Technical Specifications	Field Sizes:	Maximum Number of Characters
	Field	
	Name	40
	Company	40
	Address	40
	City	40
	State	11
	ZIP Code	9
	Phone	20
	(includes extension)	
	Label Key	6
	Name Key	8
	Max. Number of Characters per Label:	105 (sum of all label field entries)
	Sort Keys:	By name, key, or ZIP code
	Typical Sort Time:	90 seconds for 916 labels (1 diskette)
	Typical Merge Time:	13 minutes for two lists, each list one diskette long
	Max. Number Labels/diskette:	916
	Printing Capabilities:	
	User-selectable printing or masking of the following:	
	■ Telephone Number	
	■ Label Code	
	■ Name Key	
	■ Zip Code	
	User-selectable formatting capabilities:	
	■ maximum label line length	
	■ maximum number of lines per label	
	■ number of blank lines between labels	
	■ left margin	
	■ number of labels per row	
The Apple III Mail List Management Package	The Apple III Mail List Manager is supplied as a separate Apple product, as well as part of option A or B of the Word Processor package (order no. A3P0004 or A3P0005).	
Order No. A3D0003		

Word Painter

Professional Word Processing With A Personal Touch

Software

Available second quarter 1981

Apple's Word Painter software turns your Apple III computer into a powerful, personal word processing system. You can quickly compose, revise, and print all kinds of documents, from memos and brochures to form letters and entire, book-length manuscripts.

As you enter text, Word Painter shows you—on the screen—what your document will look like when it's printed. Centered lines, ragged left and right margins, tabs and indentations—they're all displayed, so that you can check document format at a glance. And Word Painter gives you complete control over printing, too, for letter-perfect documents every time.

Paint your way out of paperwork corners, with Apple's powerful, easy-to-use Word Painter software for the Apple III computer. It's ushering in a whole new age of fast, clear business communications.

Benefits

Word Painter...

- encourages fresh, creative approaches to communications by making it easy to experiment with different words, phrases, and writing styles...
- increases productivity by eliminating repetitive, inefficient routines such as retyping, replacing words, and centering lines...
- gives you an accurate picture of what your documents will look like when printed, because centered lines, ragged left and right margins, and tabs and indentations are all displayed as they're entered...
- saves time manipulating text with its powerful formatting, editing, and printing commands...
- simplifies document design and minimizes training with helpful "forms entry" displays...
- reduces the possibility of human error by signaling when you enter invalid commands

Word Painter—A Closer Look

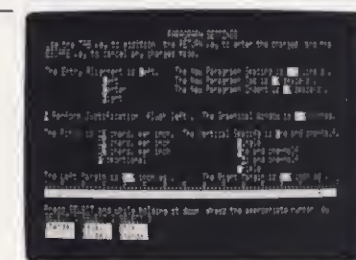
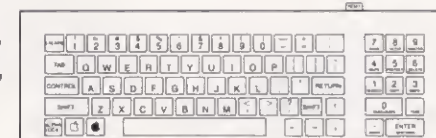
Because Word Painter works with a number of special keys on the Apple III keyboard, text editing is so logical and involves so few keystrokes that it almost becomes a natural reflex—like shifting from lower to upper case on a typewriter.

The four, dedicated cursor control keys move the cursor backward or forward (character by character), and up or down (line by line). Holding down any of the four keys auto-repeats its cursor movement. When the cursor moves past the top or bottom lines displayed on the screen, the text automatically "scrolls"—advances or backs up, as required—so that you can conveniently scan whole documents from beginning to end. Four grammatical keys on the Apple III keyboard let you position the cursor even more quickly and directly throughout the text—by word, sentence, paragraph, or page.

Some of Word Painter's most powerful word processing functions are provided through the use of two other keys, REPLACE and SELECT, on the Apple III keyboard. Using REPLACE (the key with the solid white Apple logo), you can delete text—by word—instantly. Or you can access the REPLACE mode—for one-over-one character replacement—to correct transpositions or minor misspellings.

The SELECT key is even more versatile. Using it, you can create a new document, revise a copy (without changing the original), revise the original document, protect a selected document from modification, delete a document from the diskette, print a document (either certain pages or the entire manuscript), or instantly "turn to" any page of the document you're working on.

Word Painter also features a number of special, Forms Entry displays accessed through the SET UP key on the Apple III keyboard.



These word processing aids make it easy for you to define and change any document's format, from the number of spaces between lines to the space reserved for left and right margins. You format your document by "filling out the form" displayed on the screen.

Whenever you're working on the text of a document, a four-line Status Display is present at the top of the screen, reminding you of various information, including left/right margin settings and page number. This is a handy reference which reminds you of the document format you've specified.

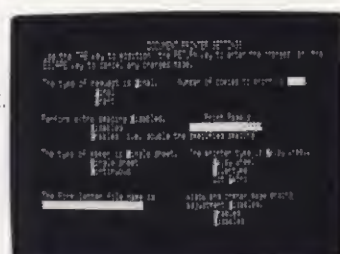
Word Painter also provides a number of powerful commands that let you quickly format, move, copy, and protect text. There's a separate key on the Apple III keyboard for each command.

Word Painter also features a powerful "search and replace" capability. Suppose that you've misspelled or misused a word throughout a document. Using the SEARCH and REPLACE keys on the Apple III keyboard, you can correct the misspelling or replace the word wherever it occurs—one instance at a time, or all at once and automatically.

Once a document is ready to be printed, Word Painter gives you a fine degree of control over the way it will finally look on paper. You can adjust all settings—margins, line spacing, etc.—quickly and easily.

And print functions such as underlining, bold printing, subscripting, or superscripting can all be specified wherever you like. Word Painter also lets you print selected pages of a report (readers see only what you want them to see), or as many as 999 copies of an entire document.

Whether you're a busy executive who needs closer control over written communications, or a beleaguered office administrator fighting the paperwork explosion, Apple's Word Painter software has been designed for you. It's the only professional word processing software with a personal touch.



System Configuration

Word Painter is already packaged with the Apple III Word Processor System. To use it with another Apple III configuration, you'll need the following:

- An Apple III with 128K bytes RAM;
- Second disk drive (Disk II for Apple III);
- Apple III Monitor (black and white);
- Qume Sprint 5 daisy-wheel printer, with your choice of type fonts, for letter-quality printing; OR
- Apple Silentype Thermal Printer, for draft copy printing;
- Word Painter training course (Apple Product A3G0001), recommended.

Technical Specifications

Language:

Written in UCSD Pascal and Apple III assembly language.

Display:

12", high-resolution, video monitor, with up to 24 lines of 80 characters/spaces, and upper/lower case.

Storage:

Up to 60 standard pages of text per diskette.

Editing Functions:

Cursor Control—Cursor can be moved forward or backward one character, word, line, sentence, paragraph, or page at a time; or directly positioned to the page specified, or to the beginning or end of text.

Deletions—Deletes by character, word, sentence, paragraph, arbitrary block, page, or document.

Softkeys—SELECT key permits choice of seven functions: creating a new document, revising either original document or a copy, printing/protecting/deleting a selected document, and displaying any specified page. REPLACE key enables immediate deletion/replacement of text.

Search and Replace—Allows automatic or manual search and (if desired) replacement of user-specified "strings" or sequences of characters, words, phrases, or sentences (80-character maximum).

Marking—MARK highlights pieces and blocks of text (indicated in inverse video) that are to be protected, deleted, copied, or moved.

Move/Copy Block—MOVE key permits repositioning MARKed blocks of text within a document. COPY key allows MARKed blocks of text to be duplicated wherever desired within a document.

Protect Text—Allows user to protect portions of text from inadvertent or unauthorized deletions, replacements, and search-and-replace modifications; also prevents changing environmental settings for protected text.

Tabs—Left tabs work like a typewriter's; right tabs shift text to the left, leaving text flush at right tab point. Center tabs automatically center text, centering as each character is entered. Also, a special decimal tab automatically stacks columns of numbers so that their decimal points line up directly under each other.

Margins—Top, bottom, left and right margins are set by user, and left/right margins may be changed at any paragraph boundary.

Form Letter Production—Special merge codes allow users to produce form letters automatically, inserting either blocks or phrases of personalized copy at any designated points.

Disk Access—Allows user to catalog, store or save files to the diskette. "Save-to-disk" process is triggered automatically when pressing MASTER key.

Environmental Functions:

Settings—SETUP key enables users to access and change text settings (margins, tabs, spacing, underlining, etc.) for as little as a single character or as much as an entire document. SHOW key reveals otherwise unseen settings by highlighting them.

Document/Page—Allows user to specify, change, and refer to such settings as paper size and space left blank for letterhead, headings, footings, and page numbers.

Paragraph—Permits initial (global) and modified (local) settings for paragraph spacing, tabbing, and indenting, as well as left and/or right justification and centering of text.

Printing Functions

Characters—Users can underline, bold face, superscript and/or subscript any character in a document. Also either 10, 12, or proportional justification can be specified.

Justification—Users can set text either to be centered, or fill-, right-, or left-justified—by paragraph, page or document.

Vertical Spacing—Permits single, one and one-half, double, triple, and quadruple spacing between each line of text. Also, graphical "windows" (contiguous blank areas) can be reserved in the text. If less than a page, the windows never cross page boundaries, and if more than a page, they always start at the top of the next page.

Final/Draft/Partial Printouts—Final printout calculates all page breaks so as to avoid "widows" and "orphans." Draft printout leaves page breaks identical to those displayed on screen, providing quicker direct access and correspondence between the page numbers of a previously printed draft copy and the modified version of the document. Partial printout permits starting/ending on any specified pages.

Copies—Up to 999 copies of the requested document can be printed. Parts of documents may be printed by starting printing on any page specified.

New Page—Allows user to specify when a new page should be started.

Paper—Settings provides for use either of continuous fan-fold or single-sheet paper.

The Word Painter Package (if purchased separately from the Word Processor System) Order No. A3D0001

With your Word Painter order, you will receive:

- Word Painter program diskettes;
- Detailed Word Painter manual;
- Sample Word Painter diskette.

Apple Pascal

for Apple II/II Plus Computers

The Powerful, Flexible Language

Language Library and Utilities

Apple Pascal is a fully professional system development environment. It incorporates the UCSD Pascal™ Operating System (Version 2.1), with enhancements for color graphics, sound generation, and Apple's special input/output features. Because it offers a compiled language, the Pascal system allows programs to execute more quickly and to take up less space than they would in BASIC. The structured programming facilities and extensive data structures in Pascal make it the language to choose for large business, scientific, and educational programs.

Benefits

Apple Pascal...

- increases programmer productivity because it provides a total software development facility...
- simplifies program design through Pascal's convenient structural mechanisms and rich variety of data types...
- lowers development costs, as extended built-in error checking routines catch syntax, type and range errors...
- lowers maintenance costs because Pascal's block structure minimizes convoluted code which is difficult to understand and modify...
- allows programs larger than available RAM to run, through the use of memory overlays...
- allows documentation, as well as program source code, to be written and modified through the utilization of a powerful, easy-to-use editor...
- supports Apple's special graphics and sound capabilities, plus control paddles, through system library routines...
- is the most transportable of all languages; it allows access to large libraries of Pascal programs and provides the capability to run your own programs on most Pascal systems...
- offers a performance increase of two to five times over equivalent BASIC programs.

Apple Pascal— A Closer Look

Apple Pascal has been designed for the sophisticated programmer or computer science student. Its richness of data types, control functions, and powerful utility routines can dramatically improve a programmer's productivity on large projects. For this reason, Apple has selected Pascal as its standard system and applications development vehicle.

Why UCSD Pascal?

Since UCSD Pascal is recognized as the microcomputer industry standard, using it as a basis for Apple Pascal gives a programmer portability. Not only can a user access large libraries of Pascal programs already in existence, Apple Pascal programs can run with minimum conversion on most computer systems offering Pascal.

UCSD Pascal is more than a language: compiler, assembler, editor, linker, and file handler are integrated within a single, powerful system. This provides the user with a comprehensive set of software tools for optimal program development. Built-in procedures and functions enhance the string, byte, and I/O capabilities. Both 36-digit integers and 32-bit floating point are supported.

™ "UCSD PASCAL" is a trademark of The Regents of The University of California. Use thereof in conjunction with any goods or services is authorized by specific license only and is an indication that the associated product or services has met quality assurance standards prescribed by the University. Any unauthorized use thereof is contrary to the laws of the State of California.



Why Apple Pascal?

Apple has taken advantage of all of UCSD Pascal's capabilities and can offer others as well. These include:

- easy access to Apple's human interface features: color graphics, speaker, control paddles, and keyboard;
- transcendental functions;
- faster disk response and transfer rates;
- extensive documentation.

System Configuration

To use the Apple Language System with Apple Pascal, you will need the following system:

- Apple II or Apple II Plus, each with 48K of memory;
- Apple Disk II with controller* (a maximum of six drives are supported);
- video monitor or television.

*While a single drive system is adequate for very small programs, two drives are strongly recommended for ease of operation and more serious program development.

Technical Specifications**Diskettes:**

16 sector format

Editor:

Editing functions include cursor control, text modification, formatting, searching and marking capabilities. The Editor offers:

- fast, screen-oriented editing for program development and text editing;
- 80-character lines (upper/lower case) available with external CRT terminal;
- 80-character lines supported in standard Apple using horizontal scrolling.

Editor Commands:

JUMP	ZAP	SET ENVIRONMENT
PAGE	VERIFY	AUTO-INDENT
WRITE	QUIT	FILLING
FIND	UPDATE	LEFT MARGIN
INSERT	EXIT	RIGHT MARGIN
REPLACE	RETURN	PARAGRAPH MARGIN
DELETE	ADJUST	COMMAND CHARACTER
XCHANGE	MARGIN	TOKEN DEFAULT
COPY	SET MARKER	

Compiler:

- Pascal source text is translated into P-code.
- A group of one or more source language procedures or functions can be compiled separately as a UNIT, allowing a large program to be subdivided into smaller, more manageable parts. Commonly used procedures and functions can be compiled once, stored in a library file, and accessed by other programs through the Linker.
- EXTERNAL routines can be declared and are later linked into the host program by the Linker.
- Compiler option specifications can be embedded in the source text to control listings, screen messages, range-checking, inclusion of separate source files, and other compiler parameters.

Compiler Options:

C	Following characters are placed directly into codefile.
G +	Allows GOTO statements.
G -	Forbids GOTO statements.
I +	Generates I/O checking code.
I -	No I/O checking.
Ifilename	Includes named source file in compilation.
L +	Sends compiled listing to SYSTEM.LST.TEXT.
L -	Makes no compiled listing.
Lfilename	Sends compiled listing to named file.
P	Pages listing.
Q +	Suppress screen messages.
Q -	Sends procedure names and line numbers to CONSOLE:.

.R +	Generates range-checking code for array subscripts and variables.
R -	No range checking.
S +	Puts compiler in swapping mode.
S + +	Compiler does even more swapping.
S -	Non-swapping mode: entire Compiler in memory.
U +	Compiles on user lex level.
U -	Compiles on system lex level.
Ufilename	Specifies name of library file for finding UNITs.

6502 Assembler:

- Permits relocatable assembly language routines to be generated for linking to Pascal programs.
- Supports parameterized macros.

Assembler Directives

Delimiting Directive for Routines:

```
.PROC
.FUNC
.END
```

Label Definitions and Space Allocation Directives:

```
.ASCII      .EQU
.BYTE       .ORG
.BLOCK      .ABSOLUTE
.WORD       .INTERP
```

Macro Facility Directives:

```
.MACRO
.ENDM
```

Conditional Assembly Directives:

```
.IF
.ELSE
.ENDC
```

Pascal Host Communication Directives:

```
.CONST
.PUBLIC
.PRIVATE
```

External Reference Directives:

```
.DEF
.REF
```

Listing Control Directives:

```
.LIST      .PATCHLIST
.MACROLIST .NOPATCHLIST
.NOLIST    .PAGE
.NOMACROLIST .TITLE
```

File Directive:

```
.INCLUDE
```

Linker:

- Combines compiled P-code or assembled machine code files into the system work file or another specified code file. This eliminates the need to recompile or reassemble existing code files when incorporating them into a program.
- Supports segmentation at the P-code level, allowing procedure or function code to be swapped in and out of memory.
- Resolves references in compiled code to UNITs or EXTERNAL routines before program execution.

Filer:

- Handles the tasks of transferring information, i.e., storing and retrieving data on disk, moving and deleting disk files, creating and modifying diskette directories.
- Reports the location of files on diskette and what devices and diskettes are available.